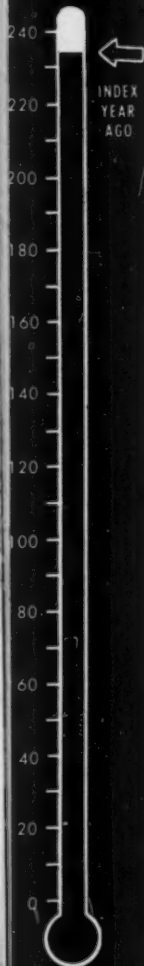


BUSINESS WEEK

HOW CAN YOU GET
Engineers?
PAGE 46



Alcoa's I. W. Wilson: "I can see no threat to the aluminum industry . . ." (page 80)

A MCGRAW-HILL PUBLICATION

FEB. 9, 1952

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B.F. Goodrich

FIRST IN RUBBER



Photo courtesy Denning Sand & Gravel Co., Waukegan, Conn.

Rubber chute-the-chutes handles rocks that wear through steel

A typical example of B. F. Goodrich improvement in rubber

TO SEPARATE gravel by sizes they haul it to the top of a tower. Then gravity takes over. The gravel chutes the chutes down to its proper pile.

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rubber products is a regular experience with B. F. Goodrich customers. BFG research is constantly at work on belting and hose of every type, on tank linings, on adhesives and every other rubber product used by industry—to make them last longer, serve better, reduce costs. That's why it pays to call in your local BFG distributor. *The B. F. Goodrich Company, Industrial & General Products Division, Akron, Ohio.*

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RUBBER FOR INDUSTRY



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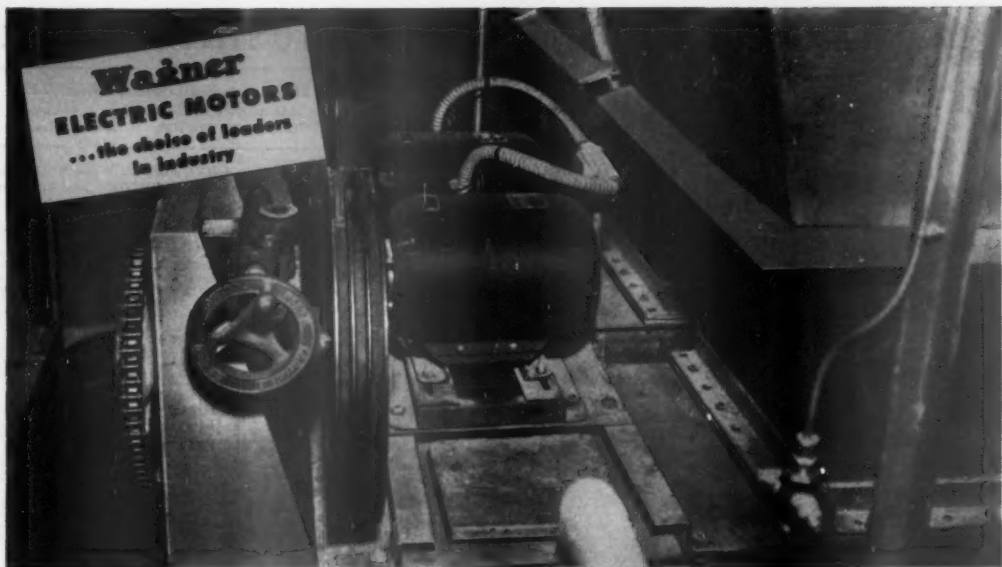
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AMERICA'S LEADING AIRLINE

AMERICAN AIRLINES INC.



How to operate on 8 hours a day...

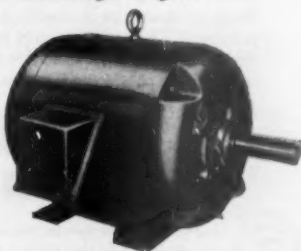
Valier and Spies Milling Co., Division of Flour Mills of America, Inc., has just constructed a new "daylight" bulk flour storage, packing, and automatic loading facility, designed to speed operations to the extent that it can turn out as much packaged flour in 8 hours as was formerly packed in 24.

An operation of this kind requires the use of electric motors—motors to help carry the flour 120 feet to the top of the plant—motors to power the sifters and mixers—motors to drive the conveyors—motors for reclaiming operations. A total of 125 Wagner totally-enclosed fan-cooled (Type CP) motors, in ratings from 2 to 75 hp, are used in this new plant.

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everywhere because they are fully protected against damage from dirt, fumes, moisture, abrasives, steel chips, and other harmful elements. Even under the most adverse conditions, Wagner Type CP Motors keep on working, delivering dependable power with no maintenance other than periodic lubrication.

For your requirements there is a Wagner Motor to fit every need—a complete line for all current specifications, with a wide variety of enclosure types and mountings. Wagner engineers are qualified to specify the correct motor for your needs. Consult the nearest of our 32 branch offices, or write us.



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LOOK FOR THE WATERMARK

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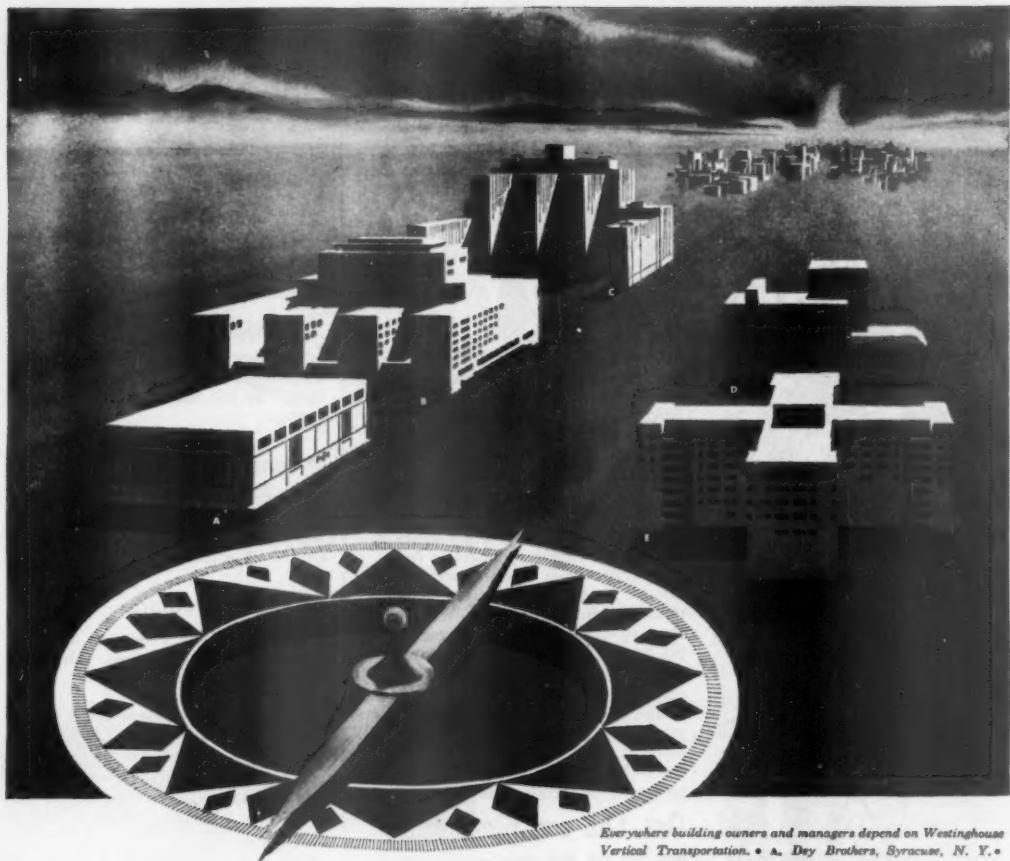
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BUSINESS WEEK • Feb. 9, 1952



Everywhere building owners and managers depend on Westinghouse Vertical Transportation. • A. Dey Brothers, Syracuse, N. Y. • B. Statler Hotel, Washington, D. C. • C. Presbyterian Medical Center, N. Y. C. • D. WGN Bldg., Chicago Tribune, Chicago. • E. Hunting Towers Apts., Alexandria, Va.

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complishments have stimulated the vertical transportation industry to work for ever-higher quality standards. In every phase of vertical transportation—equipment, maintenance, and service—Westinghouse has set the pace. So, whenever you're planning projects that call for vertical transportation—see Westinghouse before you decide!

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In BUSINESS this WEEK...

• Politicians . . .

. . . will use TV in this election as never before. And TV people are very happy about it: The electioneering will be on paid time. P. 21

• Steel Men . . .

. . . report supplies of steel are easing. They want some products decontrolled now. By fall they look for a general easing. P. 24

• Pensioners . . .

. . . are organizing their own "union" in Detroit. The movement has a big potential—and the Auto Workers are lending it a hand. P. 30

• Surplus Dealers . . .

. . . are doing a big job for U.S. business. The hitch now: There's a shortage of surplus goods. P. 72

• Pirates . . .

. . . used the "Jolly Roger" label when they bootlegged its records. Columbia charges in the first major suit to stop a widespread practice. P. 118

• Investors . . .

. . . in open-end funds gave the trade a colossal year. Here's the story behind a Wall Street phenomenon. P. 120

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Gentle, light as the touch of a skilled artisan . . .

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Specifically designed for forced

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With the development of these new, more economical panels, American-Standard gives home owners a choice of two types of baseboard heating—Heatrim Panels and the cast iron Radiantrim Panels. And, in so doing makes another important contribution to the nation's health, comfort, and the enjoyment of the home.

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BUSINESS OUTLOOK

BUSINESS WEEK

FEBRUARY 9, 1952

A

BUSINESS

WEEK

SERVICE

If jitters were metals, we'd all have enough. Never in the last year and a half have the various markets been more nervous than this week.

New curbs on world trade are the biggest factor. These coincide with brighter truce prospects in Korea. In addition, Anthony Eden tells Parliament that "fear of immediate war" has lessened.

"Is that bad?" you might ask. No; the peace news is good. But, if you held a lot of high-priced commodities, would you be happy?

France's new curbs on imports touched off this week's sharp drop in commodity prices. But Britain set the stage earlier with its tightening up. And the combination had international dealers in a real tizzy.

Don't look for a surplus of steel or aluminum or copper overnight.

Supplies, nevertheless, easily could loosen. Foreigners, who were eager buyers a short time ago, now want to dump. Domestic users with "ample" inventories may be frightened into letting go a little.

Effects might only be temporary. Yet no one is overlooking the example of lead, which turned from tight to plentiful in two months.

Many industry men maintain stoutly that steel supply already has loosened. Echoing this, on Wednesday, was Republic Steel's assistant general sales manager, L. S. Hamaker.

He told the Ohio Hardware Assn. that "nine out of 10 businessmen have all the steel they need." He blamed awkward distribution for pinches.

Commodity markets are more than ordinarily sensitive right now.

The biggest factors on the home front are that (1) the hoped-for pickup in consumer demand has not yet developed, and (2) military output still is slow enough so that its materials needs are below allocations.

In addition, farm products are vulnerable. If exports hold up, supplies are no more than adequate; if not, we have surpluses.

Prices of representative raw materials, thus far in 1952, generally have lost the modest gains they managed late last year.

The Bureau of Labor Statistics' broad wholesale average, for example, has given up a couple of points. At 176 (1926=100), it matches the low of late summer. Hides and the fats and oils are below their pre-Korea levels; cotton cloth is just about where it was before hostilities.

Food prices, however, are less than 3% below their highs—and stand just about where they did a year ago.

Little change should be expected in the cost-of-living index for either January or February. Recent price dips should take care of that.

While food costs haven't been down much, on the average, a few important market-basket items have slipped. Better supplies of fresh vegetables have helped some. Also, better shipments of livestock to packers since the strike threat ended have sent meat down a little.

Sliding vegetable oils enabled a margarine cut—and that snagged the rise in butter. Ample supplies have kept eggs cheap.

Poultry promises to offer the consumer some protection against the high

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK
FEBRUARY 9, 1952

cost of meats in 1952. Hatchery output of chicks has been at or near record levels for months. Moreover, growers plan to raise 59-million turkeys this year, 11% more than last.

You'll be eating less foreign cheese this year—unless present restrictions on imports are relaxed.

Under terms of the Defense Production Act, the Dept. of Agriculture has authorized imports of 39.3-million lb. for the 11 months ending next June. In the same 1950-51 period, 57.1-million lb. were imported.

Italy, with nearly 14-million lb., will ship one-third of the total. Emmentaler and Gruyere will put Switzerland second at 6-million lb.; Argentina and New Zealand are neck-and-neck with just over 5-million lb.

Industrial building is getting off to a fast start this year.

Privately financed work put in place in January is valued at \$179-million, 39% over a year ago. Public industrial building for the month totaled \$83-million, up 131%.

Booming industrial construction, plus huge gains in military and naval, are offsetting cutbacks in other lines.

Private residential building is 20% below a year ago. Public works (highways, hospitals and institutions, sewers, etc.) are off a similar amount. Commercial building is down by more than 26%.

Yet the value of all building in January was over \$2.1-billion; that's 1.6% ahead of the same month last year.

Look for some relaxation in government curbs on commercial building and some types of public construction, such as highways. Cutbacks have brought hardships—as well as unemployment.

Steel released for this purpose will have to come out of the hides of the less essential defense-supporting lines.

Inventory accumulation today is probably contributing little or nothing toward expansion of business activity.

Most wholesalers and retailers have been liquidating since spring. Manufacturers, however, added \$8.6-billion to inventory in 1951.

But note this: The accumulation was \$5.7-billion in the first half of the year, only \$2.9-billion in the second.

Moreover, stocks held by manufacturers of nondurable goods, after going up \$2.5-billion in the first half, declined slightly in the second.

Retail sales last week, compared with a year ago, looked the best for 1952 to date. Several laggard areas pulled ahead of a year ago; even New York City narrowed the gap several percentage points.

But the comparison with a year ago is out of kilter again. The like week a year ago was the weak sister of the January-February buying boom.

Easter's lateness will mess up year-to-year retail comparisons throughout March and April. The holiday fell on Mar. 25 last year, but won't come until Apr. 13 this time.

Thus, sales in March will run way behind 1951, and April will look very good indeed. You'll have to average them to get a real comparison.

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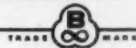
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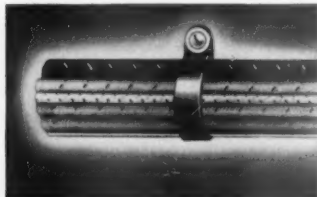
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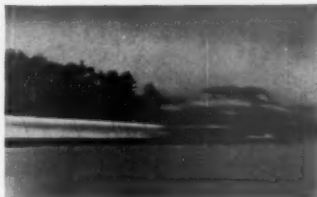
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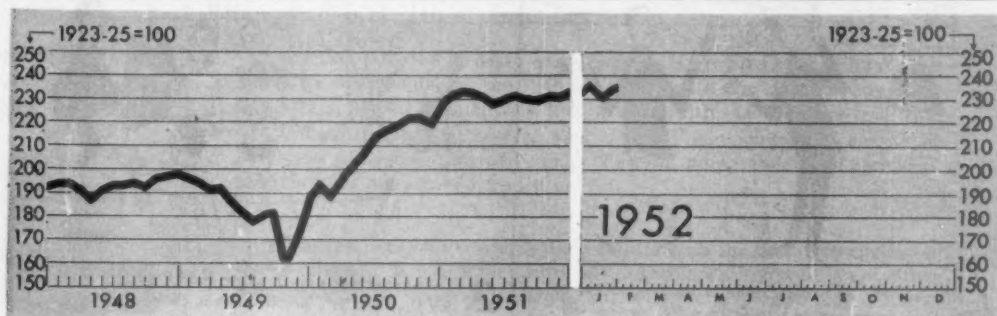
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SUBSIDIARIES: Propulsion Engine Corporation • Simplex Packaging Machinery Inc. • Sonith Industries, Inc. • Stokes & Smith Company

FIGURES OF THE WEEK



Business Week Index (above)

PRODUCTION

	Latest Week	Preceding Week	Month Ago	Year Ago	1946 Average
Steel ingot production (thousands of tons).....	2,090	2,079	2,041	1,933	1,281
Production of automobiles and trucks.....	101,504	99,722	53,601	151,206	62,880
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands).....	\$39,087	\$43,819	\$35,612	\$61,987	\$17,083
Electric power output (millions kilowatt-hours).....	7,572	7,616	7,149	7,099	4,238
Crude oil and condensate production (daily av., thousands of bbls.).....	6,225	6,194	6,187	5,939	4,751
Bituminous coal production (daily average, thousands of tons).....	1,870	1,888	1,571	1,902	1,745

TRADE

Carloadings: manufactures, misc., and L.C.I. (daily av., thousands of cars).....	72	74	73	79	82
Carloadings: all other (daily av., thousands of cars).....	49	51	52	52	53
Department store sales (change from same week of preceding year).....	-14%	-14%	+12%	+25%	+30%
Business failures (Dun and Bradstreet, number).....	164	142	126	159	217

PRICES

Spot commodities, daily index (Moody's Dec. 31, 1931 = 100).....	452.8	456.3	461.2	533.5	311.9
Industrial raw materials, daily index (U.S. BLS, Aug., 1939 = 100).....	309.7	312.4	317.3	380.8	198.6
Domestic farm products, daily index (U.S. BLS, Aug., 1939 = 100).....	353.2	355.5	358.4	412.0	274.7
Finished steel composite (Iron Age, lb.).....	4.131¢	4.131¢	4.131¢	4.131¢	2.686¢
Scrap steel composite (Iron Age, ton).....	\$42.00	\$42.00	\$42.00	\$47.75	\$20.27
Copper (electrolytic, Connecticut Valley: lb.).....	24.500¢	24.500¢	24.500¢	24.500¢	14.045¢
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.).....	\$2.52	\$2.52	\$2.52	\$2.46	\$1.97
Cotton, daily price (middling, ten designated markets, lb.).....	41.77¢	41.65¢	42.15¢	#	30.56¢
Wool tops (Boston, lb.).....	\$2.15	\$2.20	\$2.25	\$4.40	\$1.51

FINANCE

90 stocks, price index (Standard & Poor's).....	192.3	194.7	189.5	174.8	135.7
Medium grade corporate bond yield (Baa issues, Moody's).....	3.54%	3.55%	3.62%	3.16%	3.05%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate).....	2½%	2½%	2½%	1½-2%	1-1%

BANKING (Millions of dollars)

Demand deposits adjusted, reporting member banks.....	54,328	54,586	53,370	51,232	+145,210
Total loans and investments, reporting member banks.....	74,017	73,583	74,217	69,527	+171,147
Commercial and agricultural loans, reporting member banks.....	21,160	21,286	21,419	18,120	+19,221
U. S. gov't and guaranteed obligations held, reporting member banks.....	32,419	32,166	32,224	31,504	+149,200
Total federal reserve credit outstanding.....	23,707	24,116	24,825	23,051	23,883

MONTHLY FIGURES OF THE WEEK

	Latest Month	Preceding Month	Year Ago	1946 Average	
Employment (in millions).....	January.....	59.7	61.0	59.0	55.2
Unemployment (in millions).....	January.....	2.1	1.7	2.5	2.3
Private expenditures for new construction (in millions).....	January.....	\$1,460	\$1,521	\$1,586	\$803
Public expenditures for new construction (in millions).....	January.....	\$667	\$701	\$508	\$197
Consumer credit outstanding (in millions).....	December.....	\$20,610	\$19,983	\$20,097	\$6,802
Installment credit outstanding (in millions).....	December.....	\$13,488	\$13,261	\$13,459	\$3,025
Manufacturers' inventories (seasonally adjusted, in billions).....	December.....	\$42.0	\$41.7	\$33.3	\$20.5
Wholesalers' inventories (seasonally adjusted, in millions).....	December.....	\$9,995	\$10,035	\$9,388	\$5,505
Retailers' inventories (seasonally adjusted, in millions).....	December.....	\$18,310	\$18,280	\$17,793	\$9,359

* Preliminary, week ended Feb. 2.

† Markets closed.

‡ Estimate (BW—Jul. 12 '47, p16).

§ Date for "Latest Week" on each series on request

† Revised.



1. Efficient Ev, an expert, came in to cast his eye on Statler's operation and to learn some reasons why. "Why are the beds so comfortable? Why is the food the best? And why do folks say, 'Statler's, where you really are a guest'?"



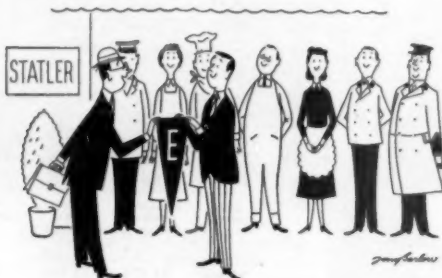
2. The answer was a cinch to see. Said Ev, "It's clear as day that Statler's *people* make it click—the bellmen, the valet, the chefs, the bakers, waiters, too—the reservation clerk—and all the Statler people are what make the Statler work."



3. "For instance, Statler's famous bed, with all its famous springs, is kept in shape by Statler men—that's why we sleep like kings. And Statler's expert maids make up the beds so tight and snug. Each day, each room is spick and span from radio to rug."



4. "In Statler's kitchen, there's a host of super-skillful guys who make the best of hearty meals, from shrimp to cherry pies. The cellarmen, the pantrymen, the butcher, and the rest, all strive to make each Statler meal rank with the very best."



5. "My business is efficiency, and Statler rates an 'E'—efficiency in service, and in hospitality. My survey's done—and I've a mind to move right in to stay with all you pleasant folks who work the friendly Statler way!"



STATLER HOTELS: NEW YORK • BOSTON • BUFFALO • DETROIT
CLEVELAND • ST. LOUIS • WASHINGTON

★
ANOTHER GREAT NEW STATLER • LOS ANGELES
(READY FOR OCCUPANCY JUNE, 1952)

WASHINGTON OUTLOOK

WASHINGTON
BUREAU
FEB. 9, 1952



Friction between Truman and Congress is growing. The situation is much the same as during the 1948 stalemate, with one big difference: The Democrats, not the Republicans, hold the majorities in Congress this time.

It's politics, but it involves you. What Congress does or doesn't do influences all business, big and small. Here's a quick rundown of prospects, now that the session is a month old:

Congress will vote the budget substantially in the form Truman asked (\$85.4-billion). It will extend arms aid. And it will continue wage, price, rent, credit, and material controls, but without the tightening Truman proposes. That will be the major work of the session.

Congress won't vote any Fair Deal leftovers, such as the Brannan farm plan, revision of Taft-Hartley, government medicine, etc. And it won't vote much of anything else it can put off. There's no hesitation when it comes to rebuffing Truman.

Take taxes, for example. Rep. Doughton and Sen. George, the two tax leaders, have advised Secretary of the Treasury Snyder against even requesting hearings on Truman's plan to hike taxes about \$5-billion. Usually, hearings are automatic.

Repeal of the fats and oils embargo is another case in point. Truman wanted the barrier removed for "defense." But the Senate wouldn't listen.

Then there are the investigations of Attorney General McGrath. Truman gave him the job of cleaning up the Justice Dept. scandal. Both Judiciary Committees then voted to investigate McGrath.

Truman is doing nothing to placate Congress. He's inviting a fight, in fact.

It all smacks of the 1948 strategy. Then Truman made big promises to big voting interests—farmers, labor, the aged. He didn't deliver, but he capitalized on his failures by blaming them on the Republicans.

Intimates say he's in "the 1948 mood" again, ready to blast Congress, whether he campaigns for himself or somebody else.

Another good year for home building now seems to be a sure thing. The National Production Authority has backed down on threats to slash metals going into new homes. The idea of a licensing system for home builders also has been dropped.

New starts will hit 900,000 or better. That's not much of a drop from last year's 1-million plus, second-largest on record.

Materials will be available for construction at the 900,000 level.

Mortgage money may be the big problem. No real shortage of cash is in sight. But lenders might be slow to take FHA-insured and VA-guaranteed paper at $4\frac{1}{4}\%$ or 4% . This could be a damper on home sales.

The stretchout of defense contracts will involve much rescheduling. As a result, many prime and subcontractors are in for bad news (page 22). The Air Force is in the worst tangle. Part of its orders are in excess of what the new budget permits. So it is in the process of cutting some contracts and extending deliveries on others. It means that a portion of the aircraft industry will wind up with smaller contracts than it had planned

WASHINGTON OUTLOOK (Continued)

WASHINGTON
BUREAU
FEB. 9, 1952

for and thus will have to trim its subcontracts. That's likely to add to the small business wail in Congress.

Ceiling prices on feed grains—corn, oats, and barley—may develop into a hot issue this spring. The Office of Price Stabilization plans to slap on the lid if prices go over 100% of parity, the minimum ceiling level.

Farmers and the Dept. of Agriculture are opposed to any such move. Their argument is that ceilings would discourage production at a time when livestock numbers are at a peak and require huge feed supplies to avoid liquidation and a short meat supply later. The prospect is that OPS will move slowly. Secretary of Agriculture Brannan will take the issue to Truman, if need be.

Retail price maintenance, under fair trade laws, won't be strengthened this year by Congress. There's strong pressure on the House and Senate, mostly from small retailers, to plug the hole the Supreme Court punched into state price fixing laws. But even if Congress should vote out a bill, odds are Truman will veto and make it stick.

The Small Defense Plants Administration is gaining prestige and power. It's winning concessions under Administrator Telford Taylor.

The NPA metal reserve was created after prodding by Taylor and SDPA. It will be used to help the smalls that can't live on their allotments.

Mobilizer Wilson's order to negotiate more contracts on the basis of idle plant and manpower is another SDPA victory, aided, of course, by election year politics.

And now the Commerce Dept. is about out of the business of aiding small business. Truman has ordered most of Secretary Sawyer's small business responsibilities shifted to SDPA. The aim is to avoid duplication.

Truman still acts like a candidate. He's as coy as can be on his plans. But he's missing no bets. Note these examples: his sudden Ohio flood inspection flight; the use of stalking horses in primaries he doesn't want to enter—Kerr in Nebraska, Humphrey in Minnesota, and Bulkley in Ohio; the quick switch on his decision to stay out of the New Hampshire primary; the encouragement the White House people are giving "draft Truman" movements.

Eisenhower is picking up strength. Note what happened in Oklahoma: He upset the regular GOP organization, which is for Taft, by winning a few delegates. That encourages Eisenhower backers elsewhere.

Taft doesn't want much made of his New Hampshire tussle with the general. So his managers are spreading the word that, if Taft only gets one or two of that state's 14 delegates, it will be an important victory.

The big weakness in the inflation fight was dramatized this week. It's the theory we can keep raising pay without raising prices.

The fallacy of it was simply stated by Ben Fairless, president of U. S. Steel: Wage absorption will dry up funds for business growth; more important, politically, it also will dry up a big source of government tax revenue.

And there you have it: As long as Washington courts the unions, and helps push wages up, it will be compelled to let prices rise, too, in order to protect income needed for the big spending programs



Saving Ground Time in Mid-air . . . with the Sperry *Engine Analyzer*

► Now Northwest Airlines saves ground time in mid-air! With the Sperry Engine Analyzer installed on all Northwest Airlines' Stratocruisers, flight engineers can get a continuous visual analysis of each engine's performance *while in flight*. Graph-like patterns on the Analyzer scope locate and identify irregularities in power plant operation.

► Upon landing, flight log information directs maintenance crews immediately to those parts that require servicing . . . avoids prolonged engine running on the ground.

Result: Northwest Stratocruisers spend more time in the air—less time on the ground.

► Sperry's Engine Analyzer is the first complete instrument provided for aircraft to isolate detailed engine difficulties. This instrument pays for itself in a matter of months. Aside from saving ground maintenance time, it also enables the flight engineer to maintain proper operating techniques at all times

. . . prevents unnecessary component replacements.

► The Sperry Engine Analyzer reflects this company's many years of experience in the precision manufacture of instruments designed to aid aviation.

SPERRY ENGINE ANALYZER IS MANUFACTURED AND LICENSED UNDER JOHN E. LINDBERG, JR. PAT. NO. 2,510,427, OTHER U. S. AND FOREIGN PATENTS PENDING.

SPERRY

GYROSCOPE COMPANY

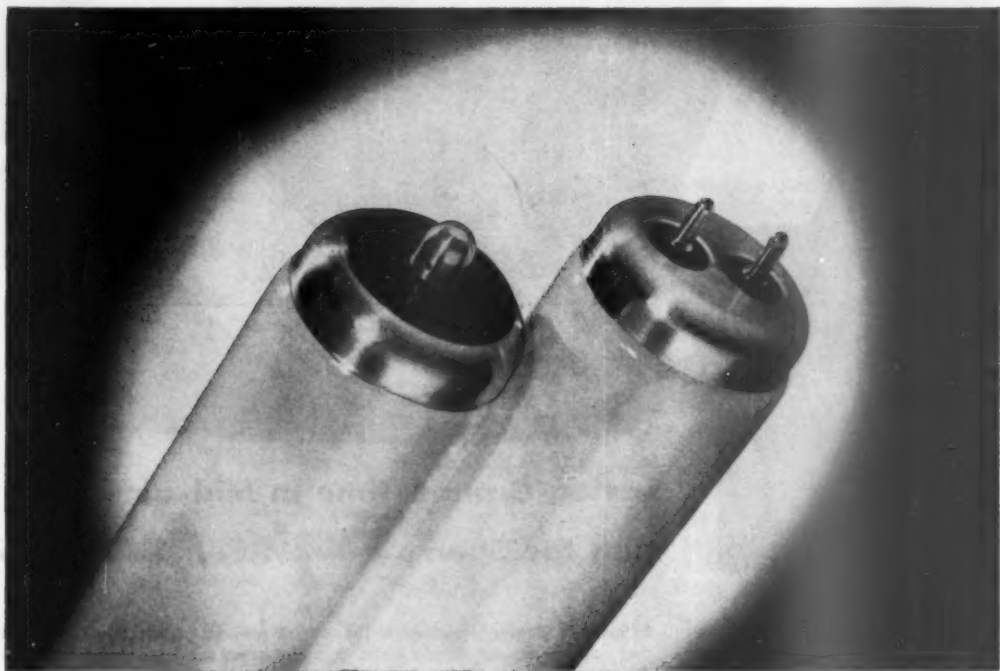
DIVISION OF THE SPERRY CORPORATION

GREAT NECK, NEW YORK • CLEVELAND • NEW ORLEANS • BROOKLYN • LOS ANGELES • SAN FRANCISCO • SEATTLE
IN CANADA — SPERRY GYROSCOPE COMPANY OF CANADA, LIMITED, MONTREAL, QUEBEC

There is a difference
in fluorescent lamps



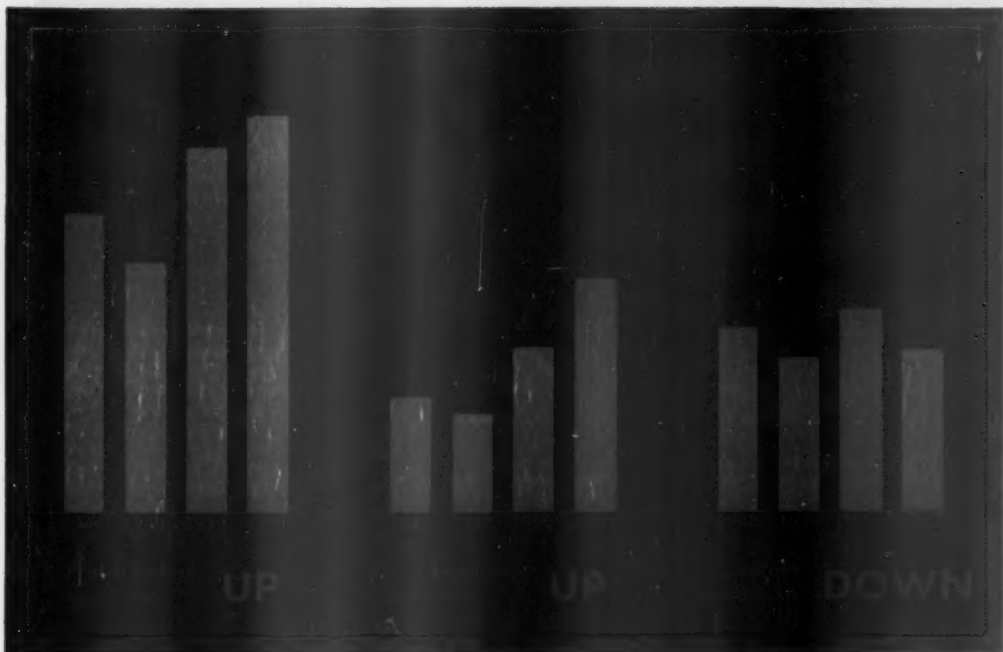
This is one ... found in G-E lamps, of course!



THE ends of these fluorescent lamps are aluminum. Rough handling doesn't crack them. Cold can't shrink them enough to make them crack the glass tube. They can be heated hot enough to make a tighter seal. They eliminate one reason why fluorescent lamps sometimes fail before they should. They're on G-E lamps, of course. This is one of many basic differences that make General Electric your best buy in fluorescent lamps.

You can put your confidence in—

GENERAL  **ELECTRIC**



1951 PROFITS WERE:

Fabulous for Government Fine for Stockholders Skimpy for Management

Companies were never busier than they are today—or more frustrated.

U.S. corporations hung up a new record for earnings before taxes—\$45-billion—in 1951 (chart). But after-tax earnings were way off.

In 1952 the picture isn't likely to be any better—and it may be worse.

For top management, the problem is even rougher than it is for stockholders. Corporations did maintain their dividends last year, but only at the expense of the retained earnings that management works with. These were cut sharply.

The big drop in net earnings results from the fact that corporations have a new majority partner—the U.S. govern-

ment. Uncle Sam took a record-breaking cut of 60% of all corporate earnings. Even during World War II, his take never exceeded 58%. So, as the chart shows, the tax collectors left corporations a lot less last year than in 1950—and even less than in 1947 and 1948.

Annual statements (page 20) show a startling uniformity. No matter what the line of business or what the increase in sales, their net is off.

• **All in Same Boat**—This applies to companies heavily engaged in defense business as much as to those that were caught in the consumer goods slump. Even the "growth" industries don't escape. A few examples:

• **Union Carbide & Carbon**, in the fast-stepping chemical field, increased its sales by 22%, but its net profit fell 16%. The difference: Taxes were up 45%.

• **International Harvester**, carrying a big load of defense orders, boosted sales by \$335-million; net profit was off nearly \$4-million; taxes were up 95%.

• **Hercules Powder** upped its sales by 34%, yet net profit slumped.

The steel industry was a good example, too. Sales shot up sharply. Yet most companies, especially the big ones, had less net profit. Only a few of the smaller outfits managed to better themselves, but their dollar increase was a drop in the bucket compared with the big-scale decline of the major companies.

• **Dividends, But . . .**—Altogether, corporations had about \$18.1-billion left after taxes. That was 21% less than in 1950. Companies were faced by two unpleasant choices: (1) Cut dividend payments, or (2) cut the share set aside as retained earnings.

Most corporations chose the second course. They paid much the same dividends as in 1950. In fact, the Presi-

dent's Council of Economic Advisers estimates that 1951 dividend payments totaled \$9.5-billion, compared with \$9.2-billion in 1950.

• **Smaller Reserves**—The drop in net earnings thus shows up in the undistributed profits column. In 1950 companies held back \$13.6-billion; last year

they retained only \$8.6-billion—the smallest sum since 1946. That dragged undistributed profits down to 48% of net, lower than any other postwar year. In 1947 and 1948 companies were holding back 65% of their net.

The cut in retained profits came at a time when companies were spending

record amounts on new plant and equipment and when inventory holdings were soaring to the stratosphere. This meant that corporations had to go often to the banks and the security markets to get funds.

• **Down During Year**—When you look at the record for the year, it seems bad enough. But the trend during the year is more discouraging. Hidden in the over-all figures for the year is a second-half downturn that has more bearing on 1952 than the 12-month total has. In the first half, net earnings ran at a seasonally adjusted annual rate of \$19.5-billion; in the second half, they dropped to an annual rate of \$16.6-billion. This was 34% below last-half 1950.

Over the course of the year retained earnings slid off even faster. In the last quarter of 1950 companies hung onto profits at a rate of \$16.7-billion a year; by fourth-quarter 1951 they were retaining at a rate of only \$6.9-billion a year.

• **Inventory Problems**—However, the picture is considerably brighter if you make an allowance for more-or-less mythical inventory profits. At the beginning of the year companies were selling off low-cost materials at high prices. Their profits, on paper, looked wonderful.

The Dept. of Commerce experts figure that at the beginning of the year rising prices gave business inventory profits at a rate of about \$8.9-billion a year.

By yearend, though, falling prices were pulling profits down to a rate \$1.7-billion below what they otherwise would have been. So if you subtract close to \$9-billion from the first-quarter rate of \$52-billion and add a couple of billion to the yearend rate of \$42-billion, much of the roller-coaster effect in the quarterly figures is leveled out.

• **A Look Ahead**—There's no up-and-down swing similar to the post-Korea boom in sight for 1952. So there should be much more stability in the picture this year.

That means good news to stockholders in one way. Business isn't likely to have to find an additional \$8-billion to finance bigger inventories this year—as it did in 1951.

So any pickup in earnings this year can go toward new plant and toward keeping the dividend rate from falling too far.

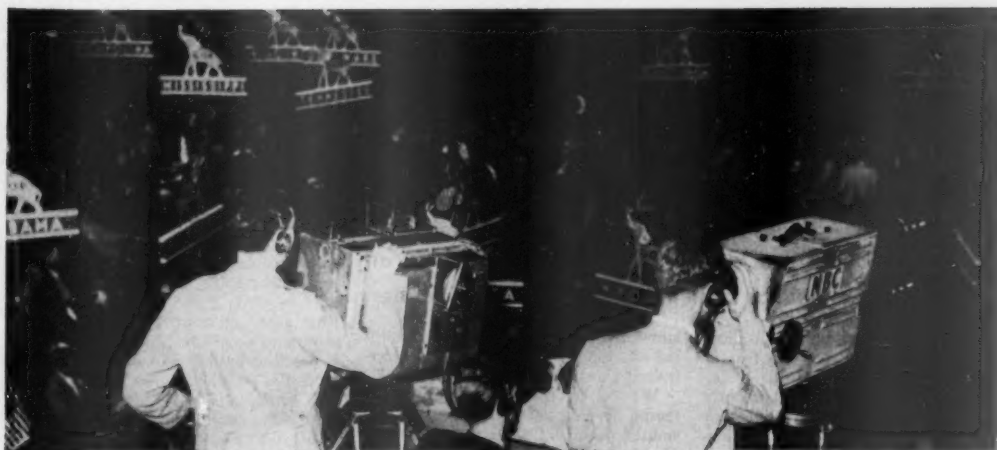
• **Still Problems**—The trend in profits is still going to leave company managements with some major headaches. Taxes will limit a company's ability to boost its net—even if it can boost sales. And expansion programs must be financed. So top management will be hard-pressed to maintain dividend rates at something close to the 1951 rate.

How Taxes Bit Into Earnings of Most Firms

	Taxes		Net Earnings	
	1951	1950	1951	1950
	In thousands of dollars			
Affiliated Gas Equipment, Inc.	2,152	2,800	1,807	2,241
Air Reduction Co.	12,514	7,548	7,482	8,625
Allied Chemical & Dye Corp.	66,159	32,822	40,548	41,212
American Zinc Lead & Smelting Co.	4,250	3,275	3,394	3,802
Bethlehem Steel Corp.	176,100	130,800	106,531	122,976
Brunner Mfg. Co.**	265	332	284	397
Burton-Dixie Corp.**	420	605	426	809
Celotex Corp.	3,584	2,125	3,497	3,003
Consolidated Vultee Aircraft Corp.**	3,800		7,750	10,241
Continental Baking Co.	4,675	4,095	4,622	5,673
Continental Steel Corp.	4,627	3,643	1,530	2,660
Dayton Rubber Co.*	3,929	2,003	2,380	2,241
Devco & Reynolds Co., Inc.**	2,091	2,345	1,971	2,786
Divco Corp.*	678	681	695	1,047
Dresser Industries, Inc.*	5,303	3,320	5,115	4,303
Eastern Corp.	2,597	1,317	1,779	1,543
Emco Derrick & Equipment Co.	1,950	830	1,097	992
Fort Pitt Brewing Co.*	492	667	470	884
Hajoca Corp.	1,170	1,005	1,014	1,247
Hat Corp. of America*	1,230	910	927	1,009
Hercules Powder Co.	30,270	14,682	13,655	14,528
Inland Steel Co.	53,693	41,224	34,398	38,015
International Harvester Co.*	114,500	48,500	63,001	66,714
International Shoe Co.**	11,343	8,193	8,978	10,957
Johansen Bros. Shoe Co.*	19	97	29	128
Johns-Manville Corp.	29,756	20,053	24,530	22,814
Jones & Laughlin Steel Corp.	54,339	33,850	30,998	39,744
Koppers Co., Inc.	20,163	11,296	10,818	11,615
Kysor Heater Co.**	330	110	181	155
Lone Star Cement Corp.	12,616	9,045	8,350	10,030
L. J. Mueller Furnace Co.	596	915	488	863
Nashawena Mills**	551	220	541	272
National Aluminate Corp.	3,100	1,711	1,500	1,773
National Tool Co.	530	130	248	168
Newport Industries, Inc.	2,787	1,020	1,954	1,445
Oliver Corp.*	7,346	7,374	6,005	6,241
Oswego Falls Corp.	1,234	1,646	1,139	1,290
Petoskey Portland Cement	217	142	224	211
Republic Steel Corp.	117,500	79,200	54,922	63,795
R. J. Reynolds Tobacco Co.	60,060	22,339	32,117	40,258
Safway Steel Products, Inc.**	423	433	392	476
Sharp & Dohme, Inc.	2,315	3,552	4,556	5,275
Smith Kline & French Labs.	5,473	4,277	4,095	4,064
Spokane Portland Cement Co.	117	52	156	92
J. P. Stevens & Co., Inc.*	23,000	16,200	20,849	23,473
Union Carbide & Carbon Co.	164,496	113,694	103,890	124,112
U. S. Steel Corp.	473,730	296,665	183,953	215,464
Wheeling Steel Corp.	33,662	17,342	17,392	18,314
Alan Wood Steel Co.	4,480	1,885	2,303	2,546
Youngstown Sheet & Tube Co.	38,692	33,820	30,644	40,616

* Years ended October 31.

** Years ended November 30.



1948 TV POLITICAL COVERAGE was exciting for listeners, costly for networks. This year new sponsorship policy means . . .

Politics Pays Its Way on Television

Everyone in politics agrees that television is going to pull a terrific weight in the upcoming national election. The tremendous impact the Kefauver hearings had on TV viewers proved that.

The networks themselves are fully aware of this fact: They're taking advantage of it to make two major policy changes:

- **The 1952 political coverage on TV** will be sponsored commercially.

- Candidates who want to do their stumping on TV will have to pay for it.

- **Pay as You Talk**—This is the first time the TV networks have sold package deals for a national affairs broadcast of such scope. The policy is seeping into radio, too: CBS has already decided to sell its entire radio coverage of the campaign; NBC and ABC are still trying to decide.

What this sponsorship means in effect is that the networks will be able to break even on the expensive TV time they would have to devote to the conventions and general elections anyway. Both sponsors and candidates are already battling for choice time spots, with FCC keeping a wary eye on the proceedings.

- **Sewed Up**—The sponsors—Westinghouse, Philco, and Admiral—are three of the nation's major refrigerator and television-set manufacturers.

The scaled package deals involve more than \$7-million paid to the three major networks. The fourth network, DuMont, is staying clear of sponsorship, will get a pooled feed from the other networks without commercials.

- **Package Deals**—Individually, here is what the sponsors will get for their money:

- Westinghouse is said to have splurged \$3-million on the political doings. This will include 34 hours of TV coverage on CBS, taking in the conventions and general elections, plus a 13-week, postconvention, "get-out-the-vote" series. Westinghouse will spend part of the \$3-million on promoting the events.

- Philco threw in its lot with NBC. The tab: \$2.4-million for 45 hours, including 40 hours of conventions and five hours of election coverage.

- Admiral signed a deal with ABC a couple of weeks ago. For \$2-million, it will get coast-to-coast pickup of the conventions and election, as well as access to ABC's radio facilities.

- **Break Even**—The networks maintain that they aren't making any money on the deals; they still have to staff and provide facilities for the conventions, defray line charges, and pay all other expenses.

Except for the spot advertisements, there will be no visible change in the way events are presented. The networks will staff and handle the programs as they always have. Programs will pack in everything from straight televising of floor events to human interest shows.

- **Political Free-for-All**—The national committees of both parties have eagerly assured their support in digging up speakers for one of the most intriguing segments of the over-all politico package. That's the 13-week, get-out-the-vote series that Westinghouse-CBS will sandwich in between the conventions and the election.

During that time candidates will do some hard-hitting stumping in a political free-for-all.

- **Equality for All?**—The new policy, which means candidates on both sides will have to buy the time they use, is raising some knotty problems for the networks. Whatever policies they use for selling choice time spots will have to comply with the rigid FCC requirement that they offer equal time and facilities to all candidates. Just how they will do this is causing some apprehension among station clearance executives, as well as rumblings in Washington.

- **Adding Fuel**—The fact that this is such a controversial election year puts an even greater strain on network planners. Ordinarily, they could relegate candidates, especially those who want a regularly scheduled series, to late-night, fringe periods. This year, however, candidates will undoubtedly be pressuring for, and getting, choice middle-of-the-evening periods. Even if such demands can be worked out to meet the exacting equal time and facilities requirements of FCC, commercial rosters could be thrown into a dither.

Say the supporters of Gen. Eisenhower put in a bid for the Tuesday at 9 half-hour period (following Milton Berle) in order to get a maximum carry-over audience. NBC could refuse the bid. But if the network decided to sell that time to Eisenhower, it would have to offer the same period to the other candidates, assuming they wanted it, to comply with FCC.

That would put NBC in a very awkward spot with its regular client. In this case, it happens to be Procter & Gamble, which spends more money in radio and television than any other client.

Less for War, More for Civilians

● That's the meaning for business of Truman's \$19-billion slash in the military budget.

● Munitions contracts are being canceled or slowed. Aluminum and steel will now be more plentiful.

● It's all part of a stretchout of mobilization for an extra year or two that has been in the works since December.

The stretchout of the mobilization program by an extra year or two is catching up with industry this week. Businessmen, to whom it has been just policy talk out of Washington, are starting to see it show up on their ledgers:

Munitions contracts are being canceled—some prime contracts, a lot of subcontracts. And a lot of other contracts that aren't being canceled are being slowed down; contractors are being told to take longer with their deliveries, plan for lower peak production rates. Air Force contracts are the ones most sharply affected—because AF procurement officers have been the most cavalier in placing orders; they just couldn't believe their plans would be scaled down.

Civilian producers can see things getting easier. The squeeze on their raw materials will get no tighter than it is now, even in such items as copper. Steel and aluminum will soon be getting easier. The point is that the rate at which military production is now chewing up metal is—on the stretched-out program—the peak rate. It won't get any bigger. And so the increased output of raw materials that will be coming in this year and next will mostly go to civilians.

• **Cutback**—At a policy level, a White House level, the decision to slow down the munitions program was taken as early as last December (BW—Dec. 29 '51, p. 25). The idea was to build just as big an armed force as ever, but to take a year or two longer to do it.

But the Pentagon never took the cutback talk seriously. It went right ahead planning, and placing contracts, on the old basis of a peak spending level of \$71-billion in the fiscal year July, 1952, to June 1953.

Now Truman has shown he means it. He has lopped \$19-billion off the Pentagon schedules, asked Congress for only \$52-billion for the 1952-53 fiscal year.

Congress will probably pony up a little more money than Truman is asking for. But there is no chance it will restore anything like the \$19-billion Truman cut away. The Pentagon now

knows it must adjust to a slower standard of arming. And that means its contractors must, too.

• **Why?**—The motives for the slower tempo are mixed and not too clear. Obviously, no one is so frightened now as almost everyone was during the rush to arm right after the fighting started in Korea.

Here is the official explanation: We have become strong enough in the 18 months since Korea to be able to tinker a little more with designs—get a much better jet plane than the MIG-15, better tanks, guns, and the like than any the Reds have. Moreover, it's easier for the economy to stand the impact of two or three \$50-billion military budgets than of one, perhaps two, \$70-billion plus budgets.

But you'll hear lot more explanations. Some of the military brass are determined to make a fight in Congress on their money cut. They're charging Truman and his top mobilization advisers with "election-year politicking" on rearmament.

On the other hand, a lot of civilian experts are privately describing some of the services' pet spending schemes as inefficient and wasteful. They charge the military wants to eat its cake and have it, too—wants to keep spending vast sums for obsolete, or rapidly obsolescing, equipment at the same time that it's experimenting with designs of superplanes, supertanks, and superguns.

• **Contractors Hit**—So far Air Force contractors and subcontractors are feeling the brunt of the cutbacks. Primary airframe producers are having contracts for older types of planes canceled, contracts for new types increased, often, in dollar volume, but slowed on delivery dates. Some machine tool contracts are already being canceled. Electronic and similar work will soon be hit.

Here's a rundown of some of the principal contract changes so far:

• A Fisher Body contract to build Bullard lathes has been canceled.

• Chevrolet Division of General Motors has been told to bring in production of piston engines at its Tonawanda (N. Y.) plant more slowly than

originally planned. The peak will now be less than 24 engines a month; eventually, the plant will probably be put on standby.

• Ford has been tooling up its engine division plant in Chicago for piston engines. It will slow that contract down, take on a new \$30-million jet engine contract.

• Glenn L. Martin will slow production of its B-57A light jet bombers from a rate of more than 45 planes a month to less than 20.

• Lockheed is slowing production schedules on all orders at its California and Marietta (Ga.) plants—abandoning plans for a new plant in Beverly Hills, easing off hiring schedules, reshuffling subcontracts.

Outside the Air Force, the effect of the munitions slowdown will show itself more in a slower rate of contract letting in coming months than in rearrangement of existing contracts.

• **Savings**—First big change in the material supply picture is that the Air Force will be able to release 39-million pounds of aluminum it had planned to use in the second quarter. Most of this will be used to fill out aluminum shortages in other military programs, but a million pounds will go to increase auto industry allotments in the second quarter, and a somewhat smaller amount will be distributed among other civilian industries.

New Procurement Rules Favor Distressed Areas

Chief mobilizer Charles E. Wilson this week set up the machinery with which procurement agencies can steer more government work into areas where cutbacks in civilian production have caused unemployment.

Under Wilson's new rules, the process starts with the defining of distressed areas. That's done by Labor Dept. Then a new Surplus Manpower Committee takes over. It includes representatives of Labor Dept., Atomic Energy Commission, General Services Administration, and mobilization agencies. The group studies the Labor Dept.'s list of areas and certifies them for contracts, even though lower prices might be obtained elsewhere. The group also recommends the dollar volume for each area.

Wilson approves or modifies these findings and recommends preference to the designated areas when GSA and Defense Dept. are placing orders. Finally, GSA and Defense Dept. report back on what they've done.



Whales Harpooned in the South Pacific . . .



. . . Wind Up as Oil in New Jersey

The country's biggest sperm oil business got a year's supply of raw material last week when the factory ship Anglo Norse docked at Elizabeth, N. J. While the cargo—the digested carcasses of 3,066 sperm whales—didn't smell like Chanel 5 to anyone outside the trade, it was great stuff for the industry: It meant 8,000 tons of sperm oil worth \$2-million.

The cargo was pre-purchased by Archer-Daniels-Midland Co. It will take care of all the company's needs for a year and leave some for resale. A-D-M started life as a soybean processor, but is now up to its hips in whale oil.

A-D-M got into the business in a back-hand way. Its chemical products division uses hydrogenation, fractionation, and distillation to produce a series of standard and special fats and fatty acids. One of the raw materials it works with is sperm oil.

• **New Field**—Back in the early 1930s, sperm oil had practically no industrial value. Probably its largest use was as fuel for railroad signal lamps. A-D-M started nosing around to see what other uses could be developed.

Company researchers discovered among other things that the oil is a good lubricant for engines because it

doesn't react much to rapid changes in temperature.

Besides, sperm oil doesn't tend to dry like linseed or turn rancid like cottonseed oil. Furthermore, it can be sulfonated, sulfurized, sulfated, emulsified, and saponified. Another sperm oil property is its high film strength, which makes it a valuable asset to cutting oils and other high-speed and high-pressure lubricants.

Armed with this knowledge, A-D-M salesmen began a door-to-door campaign to promote sperm oil in various industries. Once they got a toe in the door, there was little sales resistance. As a result, A-D-M now purchases the oil in multithousand-ton lots. Commercially, it's used in tanning leather, making textile chemicals, cutting oils, greases, and special-purpose lubricants, and cosmetics.

Main reason that A-D-M purchases in such large quantities is that a whaling expedition—while nothing like it was 50 years ago—is no mean chore. It requires large outlays of cash. In addition to the factory ship, there is a fleet of "chaser" ships that do the actual hunting and harpooning. And the whaling grounds are thousands of miles away. (Last week's cargo came from off the coast of Peru and Chile.)

• **The Company**—A-D-M went into the business of processing and selling sperm oil back in 1929, when Werner G. Smith of Cleveland sold the company his processing plant. Smith stayed on as an executive vice-president, in charge of the company's Cleveland division.

In 1932 A-D-M bought out Cook-Swan Co., Bayway (N. J.) processors and dealers in whale oil. A-D-M researchers began their search for new uses, and the business has been growing ever since.

At the end of World War II whaling fleets were badly depleted. Faced with a growing shortage of sperm oil, Smith went to Norway in 1945 and secured a medium-sized whaling factory ship, the Anglo Norse.

With the Norwegians holding around 60% of the stock, Smith took the other 40%—20% of which he later sold to A-D-M—and formed the Spermacet Whaling Co.

• **Family Troubles**—In 1950 Smith quit A-D-M. A year later he disposed of all A-D-M interest, formed his own Cleveland company again. But last December A-D-M sued Smith for \$2,178,000 and an accounting of Smith's management of the Cleveland division. In the suit Smith is accused of paying Smida, Inc.—a Smith-controlled company set up to market Spermacet's products—exorbitant prices for sperm oil and of inducing A-D-M to sell back to him its 20% interest in Spermacet by concealing facts from A-D-M.

Steel Starts to Get a Little Easier

● A few types are already becoming plentiful, though over-all supply has not caught up with demand.

● Industry is actually asking that some types be decontrolled.

● Production is increasing steadily. The real loosening up of the metal may be felt by the third quarter.

"A buyer nowadays comes to us and only asks for the steel he wants. He's not on his bended knee any more." That's how a top sales executive this week explained the change that is beginning in the supply-demand situation for industry's most basic metal.

Just about everyone in the industry agrees that the extreme pressure on steel is off. They hastily add, though, that this does not mean you can get any kind of steel when you want it. But there is no doubt that the supply squeeze is relaxing. And it is becoming clear that from here on out further improvement can be expected.

• **Above Capacity**—Steel mills are still running at better than 100% of capacity, indicating that on the whole supply has not caught up with demand. Order books for the second quarter generally are filling up. Therefore, the real loosening up of steel supplies isn't expected before the third quarter.

Meantime, however, certain steel products are becoming more plentiful. It reached a point last week, where the government controllers were advised to add half-a-dozen kinds of steel to the decontrol list. To date, only straight chrome steel has been decontrolled.

Any major change in the supply situation won't be simple. The picture is more complicated than usual. Here are the reasons for what is going on:

Steel production is steadily increasing. The mills were equipped to turn out ingots at a rate of 108-million tons a year at the start of 1952.

During the first half of the year, expansion programs are expected to raise capacity more than 6.5-million tons.

All during 1951, steelmaking furnaces operated at an average slightly over 100% of rated capacity. If they were to keep that up during 1952, the increased output would come to something like 5-million tons. There are considerable doubts, however, that there will be that much of a bulge. The tight scrap situation is a restraining factor on the one hand while the tapering demand for steel is a limiting element on the other.

The peak demand for steel to be used in munitions is probably here now. The pipelines are pretty well filled, and the

rate of consumption from here on will be measured by actual production of military hardware. So military requirements will not exceed the present percentage take, which is about 15%.

Inventories of steel exceed the legal limit in many cases. Those holding excess stocks will have to trim down their orders at the mills in order to bring inventories back to the 45-day-supply limit. Frequently, inventories are too high because of cutbacks in government orders, not because steel was being bought too heavily.

The supply of other metals—particularly copper and aluminum—is limiting the amount of steel that can be used. In fact, the supply of some of these may determine the pace of the whole defense program.

The Controlled Materials Plan is only now making its full effects felt. Washington has been dividing up the materials pie under this scheme since July 1. But it wasn't until this quarter that consumers really began to realize that there was just so much steel being distributed and they would get only what had been allocated. Previously, they had been putting orders on the mills, hoping to get a little more than they had tickets for.

• **In Plenty**—Those are the reasons why the supply situation looks different and really is beginning to be different, too. Naturally, the greatest interest currently is in those kinds of steel that are more plentiful than others.

This week steel companies were freely admitting that they would like to see controls lifted on the following items: merchant wire products, carbon tool steel, merchant pipe, cold-rolled sheets, and the so-called secondary products, which mean off-grades of steel. They want them decontrolled, of course, because they see their order books thinning out first on those lines.

• **The Tight Spots**—Plates top the list of steel products still in heaviest demand. They are always a key item in any kind of military program. This is no exception. No end is in sight for plates in the current defense effort; therefore, there should be no weakness in that product for months to come. Plate demand is still so terrific

that strip mills are rolling plate wherever and whenever possible.

Structural shapes are in tight supply. They will continue to be as long as the whopping big industrial expansion program continues to roll alongside the military expansion program. Little relief is in sight as far as new capacity is concerned. This is one category where expansion is not planned in a big way.

Hot-rolled and cold-finished bars are tight as ever, mainly because of military needs.

• **Oil Country**—Pipe mills generally are operating at high levels. Oil country goods in particular are right up to the top mainly because of the high rate of well drilling activity. One company claims it is still doing well on pipe that is distributed through the plumbing and heating industries and that jobbers still don't have well-rounded stocks.

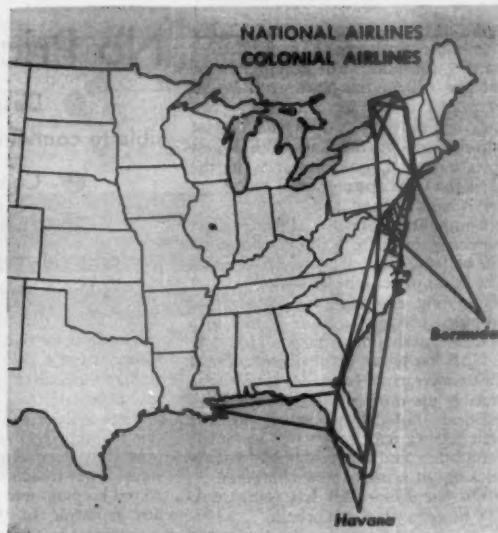
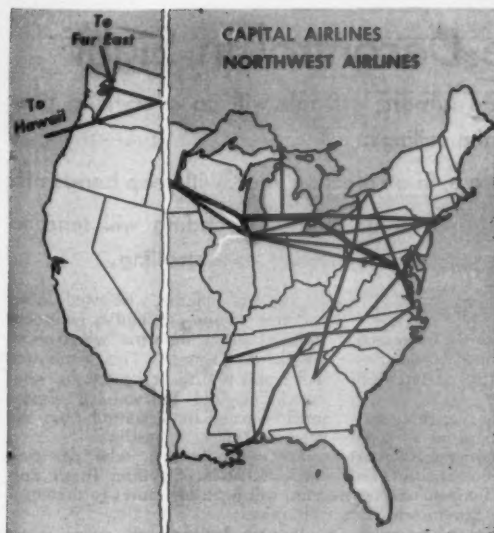
Almost all the alloy steels still are in heavy demand. The main exception is straight chrome, already decontrolled. Producers admit there has been a slackening demand for some time. On the other hand, they say their customers want more and more high alloy steels, which go to the jet engine programs among other things. Stainless bars are also very tight. So is valve steel. Silicon sheet and strip is slackening due to the lower rate of activity in the electrical appliance industry.

• **Variations**—With such a wide range of steel products in varying degrees of tightness or looseness, it is only natural that all companies producing steel are not feeling the effects the same way.

One major producer, in reporting that its order books were filling up well for the second quarter, claimed it was feeling the demand change only in flat-rolled products. It said that this was not much of a problem as yet. The company foresaw no real dropoff until the second half of the year; it isn't sure that it will be affected much then because it makes so many heavy items. These are the items, such as structural steel shapes, that are buoyed up by the plant expansion program and by direct military demand.

Another steelmaker said its schedules seem to be pretty comfortably filled for the second quarter. But it made no bones about anticipating a marked change downward in the third and fourth quarters.

Some steel men are counting on the automotive industry to hold production up if other demand does slacken. They hear reports from Detroit that at least 4-million cars will be built. So they see this fat civilian market taking up a good bit of any slack.



ROUTE SYSTEMS will be combined as in these maps if CAB approves the way the . . .

Airlines Choose Up Stronger Sides

The current flurry of airline mergers could remake the air route map of the U.S. almost overnight. Four trunk-line mergers, two of them dating from the past three weeks, are up for Civil Aeronautics Board approval. Inasmuch as CAB itself is holding the shotgun for these weddings, the blessing shouldn't be long in coming.

This urge to merge isn't mere happenstance. It's the fruit of a calculated

CAB policy to make big ones out of little ones, to get trunk lines that can stand on their own feet without subsidy. CAB wants at the same time to get cost structures fairly uniform. That eases the problem of setting rates at which everyone can make a dollar.

• **Mail Pay and Subsidy**—Last fall CAB separated subsidy from compensation for carrying the mails. National Airlines and the Big Four lines—American,

Eastern, TWA, United—are operating this fiscal year for the first time without subsidy. The Big Four also get the lowest rate of mail pay: 45¢ a ton-mile (BW-Oct.13'51,p25). The mail pay rate ranges all the way up to \$7.26 a ton-mile for Mid-West and Wiggins.

By combining some of the smaller, high-rate, high-subsidy lines, CAB hopes to improve the over-all efficiency of the airlines system. Half the com-

panies in the proposed mergers get 75¢ a ton-mile for carrying mail, besides drawing subsidies. An example to be watched will be the Northwest-Capital merger, if it's approved. These two lines are drawing two of the biggest subsidies among the lines with lowest operating costs. Northwest is in the 45¢-a-ton-mile class for mail pay; Capital is now getting 53¢.

• **Competition Stays**—CAB encourages mergers only where it thinks operations will be more efficient, more economical. The trick: to get self-sufficiency without eliminating competition. Mostly, the proposed mergers add one system to a nearby system (maps, page 25).

CAB has talked about mergers for at least two years, but the idea is only now picking up momentum. A couple of big deals started the snowball; now the little fellows want to get tied up quick, before they find themselves individually bucking an array of new combines.

• **On the Fire**—CAB has four trunk-line mergers up for approval:

• **Capital-Northwest (map)** popped up last week. It takes in the biggest territory of all; the two lines separately are flying 8,248 domestic route miles, about 18,000 route miles to the Orient. Even with some boiling-down of domestic routes, the merged line would turn the Big Four into a Big Five. None of the Big Four flies more than 7,100 route miles now.

• **National-Colonial (map)** is being linked in Washington talk this week with the merger of:

• **Delta-Northeast (map)**. The latter merger is contingent on CAB grant of an Atlanta-New York route extension, which is unlikely to be given, or on buying one of Capital's present southern routes to close the gap. Latest talk concerns possible merger of all four lines: Colonial, National, Northeast, and Delta.

• **Mid-Continent-Braniff (map)** has a plan to join routes at Kansas City, Tulsa, Houston, and Chicago. This proposal came up last month.

• **Out in the Cold**—Approval of all these mergers would leave only three orphans among the small trunk lines: Continental, Chicago & Southern, and Western. Continental was left out in the cold when Mid-Continent ducked CAB's pressure for a merger with Continental and lined up with Braniff instead.

CAB has suggested other possibilities for Continental and Chicago & Southern, including alignment either with the Braniff-Mid-Continent pairing, with each other, or with one of the Big Four. Western is a harder problem, and CAB hasn't tried yet to lay out any merger pattern there. The line serves the West Coast and the Utah-Idaho-Montana area. It might fit into the Capital-Northwest package.

No Price Decontrol in Sight

● Despite rumors, officials will do everything possible to continue the ceilings.

● Congress, in an election year, will keep hands off.

● The stretchout of military spending will tend to prolong shortages, and thus prevent decontrolling.

Don't be fooled by the Washington stories about decontrolling prices.

The facts are that, for the foreseeable future, there's no chance of the controllers themselves putting through any real decontrol.

Price officials will do everything they can to keep legal ceilings on all products. But they will make some concessions. They'll reduce to a minimum the record-keeping and eliminate entirely any reporting to the government for companies in industries where prices are well below ceilings.

• **No Change**—Congressmen, when they get around to extending the controls law, won't axe any of the price controller's powers. In fact, chairman Burnet R. Maybank of the key Senate Banking and Currency Committee introduced an extension bill this week, without waiting for the President's proposals. Maybank's bill called for continuation of the law for another year almost as is.

• **Stretchout**—Here's what's behind this prospect:

The new policy of stretching out the arms program makes it easier for the country to carry the burden more comfortably (BW—Jan. 26 '52, p. 168). And it stimulates the talks and hopes for decontrol. But the stretchout also means that the arms buildup, which brings on the shortages, which bring on controls, will last that much longer.

Chief mobilizer Charles E. Wilson now says: "Shortages will last at least through 1952 and to some lesser degree through 1953; substantial relief will not be felt until 1954." You can substitute "price controls" for the word "shortages," and Wilson's statement rings just as true.

Right now, the best guess is that we're committed to a military spending schedule that won't be changed much, regardless of who is in the White House for the next four years.

• **Where It Began**—The rash of talk about decontrol sprang from price controller Mike DiSalle. But a careful reading of DiSalle's statement before the watchdog committee on defense production shows that actually he spoke strongly against any decontrol now.

All DiSalle said was that he would create a sort of "watchdog committee"

of top OPS officials who would keep checking on the possibilities of decontrolling items or industries where prices are below ceilings. This committee will report to DiSalle's successor, whoever he may be. But you can't expect much pressure for decontrol from the price controllers themselves.

Certainly the man who sits over OPS, Economic Stabilizer Roger Putnam, will fight any moves to decontrol soft prices.

Putnam believes soft goods prices will be pushing their ceilings before year-end. Furthermore, Putnam also believes a new round of "scare buying" could be triggered by a switch in consumer psychology and that removal of some price controls might make consumers decide they'd better buy now.

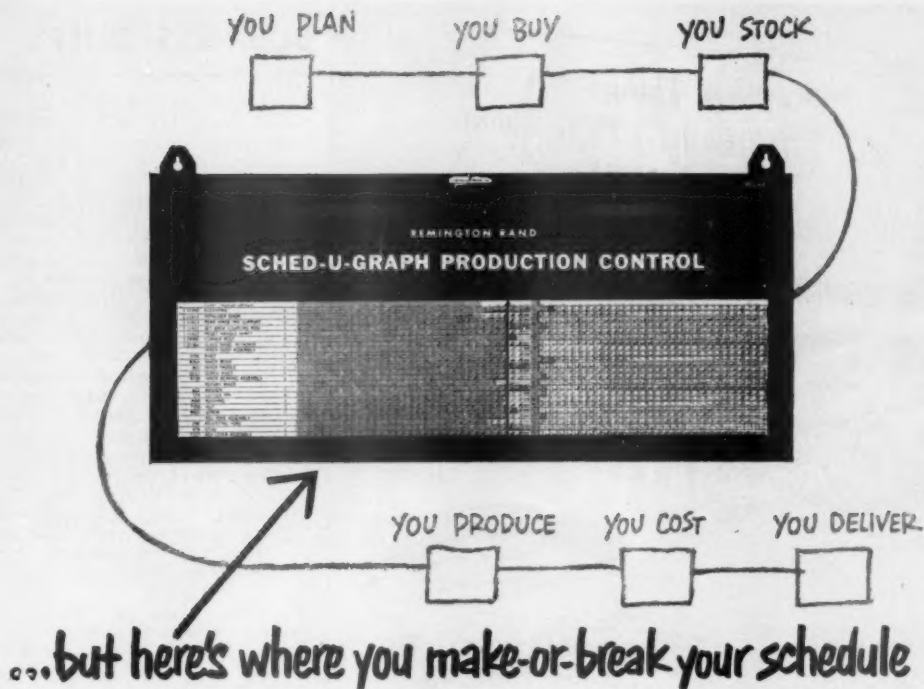
Congressmen might stick into the price control law some provision for decontrol at the discretion of the President. But their object is to avoid taking any stand on controls that might hurt them at the polls in November. The congressmen themselves won't order decontrol.

• **Inflation**—The reason is pretty obvious. No one seriously doubts that there is a real threat of inflation. The congressmen won't risk being on the wrong side of this issue—the cost of living, inflation, and price controls—if that should turn out to be the key issue by November. You can look for them to leave the Administration its present powers over prices at least until March or June of 1953, when there's another Congress, perhaps another President.

• **Pattern Set**—In general, the top price officials say the pattern of controls is just about set, that they have no new kinds of orders up their sleeve.

Big job at the moment—especially on industrial products—is working through the applications for Capchart price increases. As of this week more than 1,200 companies have applied for price increases on nearly 5,000 products.

The heavy pressure falls on the hard goods, industrial equipment, and materials areas. In soft goods, the controllers are trying to keep hands off as much as possible. Key activity has been on lowering ceilings mainly on raw materials, which were at their peak when the general freeze was announced.



Just look below. Then you'll see why production men swear by Remington Rand Sched-U-Graph. This efficient, down-to-earth device *shows* you, graphically, how close each job is to schedule — *in time to take action if and where action is needed.*

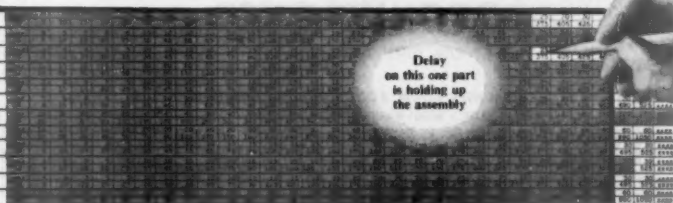
Today — as in World War II — Sched-U-Graph and other Remington Rand systems are helping plants do "the impossible" through effective control of production ... machine loading ... procurement ... inventory. For complete facts and significant case histories, read our new 56-page illustrated booklet "Production Control Systems and Procedures" (X 1268). Phone our nearest office for a free copy or write to Room 1641, 315 Fourth Ave., New York 10. **Remington Rand Inc.**

here's how Sched-U-Graph Production Control works

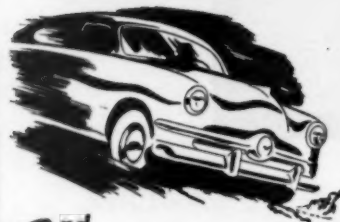
Top line on this Sched-U-Graph represents a pump assembly — each line below, one component part. On each line is recorded, in advance, each day's production quota and the total to date. The sliding bar signals show work actually completed. The black vertical line indicates

today's date, and shows how much work should be done. In this case, all components but one — the totalizer door — are on or ahead of schedule, but the whole assembly is delayed. You see the delinquent in a flash, and know exactly where corrective action is needed.

PUMP—MOTOR DRIVEN		
1-11392	ECCENTRIC	1
1-11415	TOTALIZER DOOR	1
1-11413	REAR HINGE PIN SUPPORT	2
1-11421	SET-BACK COUPLING ROD	1
1-11422	RESET HANDLE SHAFT	1
1-24946	CORNER POST	4
1-25364	GLASS PANEL RETAINER	2
MIXER BODY ASSEMBLY		
3356	RIVET	1
8264	MIXER BODY	1
865	MIXER PADDLE	1



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You will like **BETTER** about
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You'll find you still have full braking power going down hill.

2nd

If you get stalled in mud or snow, you still have that necessary "rocking" ability to pull out.



3rd

When you stop—you stand still. There's no creeping—no need to keep your foot on the brake.

Today—on your new car you want Automatic Transmission. Once you get all the facts about Borg-Warner Automatics—beautifully engineered and produced by B-W's Detroit Gear and Warner Gear Divisions—you will want to make sure you enjoy the everyday driving benefits of B-W engineering and production.

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BUSINESS BRIEFS

The building industry thinks that it will be able to start at least 900,000 homes in 1952 under the new rules regulating its use of scarce materials (BW—Feb. 2'52, p24). National Production Authority and Housing & Home Finance Agency have set 800,000 as the target, but builders think new copper and steel limits based on floor area will let them go higher than that.

Howard Hughes won't have to sell his stock in the New Theatre Co., theater-owning successor to RKO, until he feels like it. The Supreme Court ruled this week that Hughes didn't have to meet Justice Dept.'s deadline, Feb. 20, 1953 (BW—Nov. 3'51, p58).

Schering Corp., former German-owned drug manufacturer in Bloomfield, N. J. (BW—Jan. 12'52, p22), will be returned to private ownership next month. Justice Dept. will open bids Mar. 6 on all its 440,000 shares.

The Senate unanimously confirmed James L. Robertson of Nebraska and Abbot L. Mills, Jr., of Oregon as members of the Federal Reserve Board (BW—Jan. 26'52, p21).

Thrift deposits in New York State banks can now draw up to 24% interest, the state banking board decided this week. The old maximum was 2% (BW—Feb. 2'52, p110). The board set a \$10,000 limit on individual accounts in savings banks and restricted the 24% maximum interest rate to the first \$10,000 of special interest and thrift accounts in commercial banks.

A rate war among eastern railroads for Midwest grain business was nipped by the Interstate Commerce Commission. Effective last week, the rail rate to New York and New England harbors was dropped $\frac{1}{4}$ ¢ a cwt. to equal the rate to Baltimore and Philadelphia (BW—Dec. 8'51, p28). When another round of $\frac{1}{4}$ ¢ reductions was announced, ICC called a halt pending full study.

Stiff competition to Technicolor in the movie field is offered by a new Ansco color process. Ansco gives the studios a film of three color-sensitized layers that can be used with standard equipment and exposed and developed like black-and-white film.

The first two trucks especially designed to operate on liquid petroleum gas (BW—Jan. 27'51, p69) are on the way. International Harvester announced its LP-gas truck this week; Reo has one coming next week.



How Fires Start . . .

Carelessness

Top-of-the-list cause of fires, according to study after study, turns out to be just plain human carelessness.

Under the heading "Careless smoking habits" you'll find such oddities as the

waitress who cleaned *hot* ash trays with napkins destined for the laundry chute, and the mechanic who tossed a match into a puddle of gasoline. But far, far more frequently it's simply the ordinary guy who unthinkingly tosses away a lighted match.

How Fires Are Stopped . . .



Grinnell Sprinklers

Education does a world of good to prevent fires from *starting*. But until human behavior is perfect, your best protection lies in *automatic control*.

The surest control is with Grinnell Automatic Sprinkler Systems, which check fire at its source, wherever and

whenever it may strike, with automatic certainty.

No indemnity check can possibly replace scarce materials and equipment today, or restore lost records or customers. What's more, if you have fire insurance, you're probably paying for Grinnell protection anyway . . . *why not have it!*

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FIRE PROTECTION SYSTEMS

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LABOR



FIRST MEETING of Retired Autoworkers was a startling success. Summoned by Frank Tuttle (right), oldsters were eager to organize.



UAW CHIEF Walter Reuther addressed group, was dubious about it at first. Now he knows there's big future for . . .

New Militants: A Pensioners "Union"

Take note of these initials: RAO. They stand for Retired Autoworkers Organization, a brand-new outfit in Detroit with a red-hot idea.

The idea is as simple as salvation, and on its first run it looks as though it has almost as much appeal. There are over 4,000 retired auto workers in Detroit. There is much in common in their background, much in common in the problems they now face, much in

common in their present aspirations. For organization purposes, they're a natural. And they are being organized.

Here's RAO's "preliminary" program:

- Increase company pensions and social security, preferably with escalator provisions that will keep retirement payments in pace with living costs.

- Continue life, hospital, health insurance, and other welfare provisions

to keep the retired employee covered.

- Make retirement voluntary.

- Have pension credits transferable from one plant to another.

And that's just a starter.

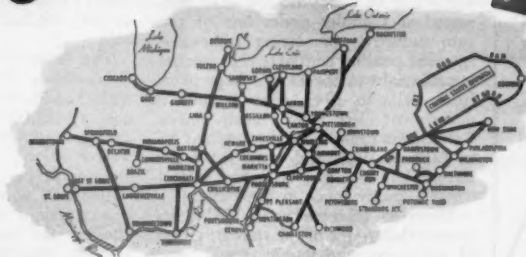
RAO's first meeting, announced in small type in the United Auto Workers newspaper, brought out 412 oldsters—better than 10% of the eligibles. Surprised by the interest, UAW had its recreation department sponsor a "social



We've lifted a load from shippers' shoulders

Not knowing the whereabouts of an important carload is a burden to any shipper. But it's a burden that can now be dropped! Through B&O's *Automatic Records*—a feature of Sentinel Service, both shippers and receivers immediately hear when the schedule of a Sentinel car is interrupted—and again of its reforwarding.

The siding-to-siding dependability of Sentinel Service, plus this *Automatic Records* feature, offers shippers a valuable mind-easing service. *Off-line shippers, too, can benefit. Ask our man!*



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Give Us This Day Our Daily Bread (and let it be light and airy, say Americans). YEAST, whether it be fresh or dried, finds that G & G Task Papers* provide all the qualities its exacting packaging requirements demand. One of the best packages for bread itself is glassine.

Papers that Work Overtime



Suds for Duds. Growing constantly in popularity are the new synthetic detergents. Package-wise they need a good deal of moisture protection. This is being done by laminating a liner to the carton board. The wax laminant makes a fine moisture barrier. And, the liner of Rhinelander Greaseproof won't let the wax strike through to the detriment of high-speed packaging.

*G & G—the functional Rhinelander papers that serve all America in hundreds of ways.



gathering." It was on a day when Detroit was hit by one of its worst blizzards of what has been an especially severe winter. Nevertheless, 900 pensioners came. The UAW had a bull by the tail. A tolerant, somewhat paternalistic interest in the RAO idea on the part of Walter Reuther and UAW's officialdom gave way to an awareness that this is something really big.

• **The Prospect**—This is what can be envisioned for RAO:

• Expansion from Detroit into other auto centers.

• Emulation by pensioned unionists outside the auto industry, ultimately merging into an organization of pensioners from many unions.

• Tapping of a recruiting pool of pensioned industrial workers that is estimated to top 10-million by 1960.

• Active caucuses of pensioners operating within the unions (in the CIO, and many AFL unions, retired unionists retain all membership privileges).

• Energetic political activity, concerned originally with welfare legislation, inevitably developing broader goals.

• Pressure on union officials to bargain expanded pension and welfare benefits from employers.

Not all of these things may be in the works—at least not immediately. But they must be accounted part of RAO's potential.

• **Letter Writer**—The seed of the RAO idea was planted by Frank B. Tuttle in the "Letters Column" of the Michigan CIO News. Tuttle has some standing in this specialized branch of literature. He has probably had more "letters to the editor" published than any other man in Detroit. He addresses most of them to the editors of labor papers.

Tuttle's original communique on the prenatal RAO talked about pensioners being a brand-new economic class in society. "It is important," he said, "that we organize."

Tuttle's use of the pronoun "we" was not editorial. He, himself, has the distinction of being the first man pensioned at Chrysler under one of the auto industry's pioneering labor-management pension contracts. He worked as millwright in the Dodge forge plant from 1919 to 1943, then became a department clerk after a heart illness. Retirement came when he reached 65 in August, 1950, and until RAO got started he was, like so many retired workers, pretty much at loose ends.

Never an office-seeker in UAW, he is nevertheless one of the stalwart group of old-timers who fought, struck, and organized for the union, helping it get established.

• **First Boost**—Tuttle's little screed in the Michigan CIO News got some unexpected attention. Victor Riesel, a

columnist whose "Inside Labor" is syndicated to 177 newspapers, wrote a piece on it. Tuttle credits Riesel with getting his idea off the ground and airborne. "I got letters from retired workers all over the country," Tuttle says. "Interestingly enough, most of them were AFL members. There won't be any jurisdictional battles among the old-timers. They all wanted me to get something started."

Tuttle, and the men who are now working with him to build RAO, have scorn for what unions are presently doing for retired members. "The most the unions now do is let us have a clubroom; provide card games, checkers, picnics; maybe help a little in finding part-time work." What Tuttle wants is organized economic action.

Tuttle takes some pride in pointing out that he got no help from the UAW in getting RAO going. "I couldn't get the international to go along," he says, "but I got a bunch of rank-and-filers together, and we pushed it."

Now that RAO is rolling and looking bigger every day, the UAW is not expected to remain aloof. An imaginative labor leader like Walter Reuther can't fail to see some great possibilities in the idea. And if, for some reason, he does want to keep hands off, there are plenty of ambitious union officials who will welcome a chance to move in.

It's Back to Work for Gulf Coast Ship Workers

Gulf Coast shipyards are busy again this week. The last major strike of a series that has plagued Gulf yards since last June is settled.

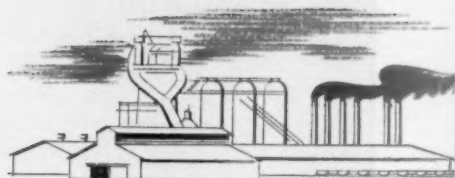
Last week a 191-day tieup at Todd-Johnson Shipbuilding Corp. yards in New Orleans ended, along with two shorter strikes at Mobile yards. The week before, labor peace returned to Alabama Dry Dock & Shipbuilding Co.'s Mobile yards—struck 167 days.

• **Come to Terms**—Settlement terms differed in the four yards, but all wound up with the same basic wage: \$1.87 an hour.

The Industrial Union of Marine & Shipbuilding Workers (CIO) settled with Todd-Johnson for a 32¢-an-hour raise, a \$125,000 payment to be divided among employees on the basis of hours worked during prestrike negotiations and double pay for all overtime.

IUMSW signed with ADDSCO for 25¢ an hour more, an 18¢-an-hour "bonus" for hours worked during the 10-week prestrike negotiating period, and double pay for overtime.

AFL's Metal Trades Council in Mobile ended shorter strikes at Gulf Shipbuilding Co. and Waterman Steamship Lines yards. It got 14¢ an hour.



They did

The way this steel mill operator* licked his production problem spells out an answer for every executive who is trying to produce more. His problem was acute because he needed more production from the basic physical facilities he already had. Yet he could ill afford lengthy shutdown time.

what

So he asked Westinghouse engineers for help on a complete tandem mill drive . . . not just a quotation on devices. His staff and ours worked out an application of many devices—motors, controls, motor generators—to let him produce more with what he had. Result: production of this tandem mill was doubled, and the complete change-over made in 66 hours!

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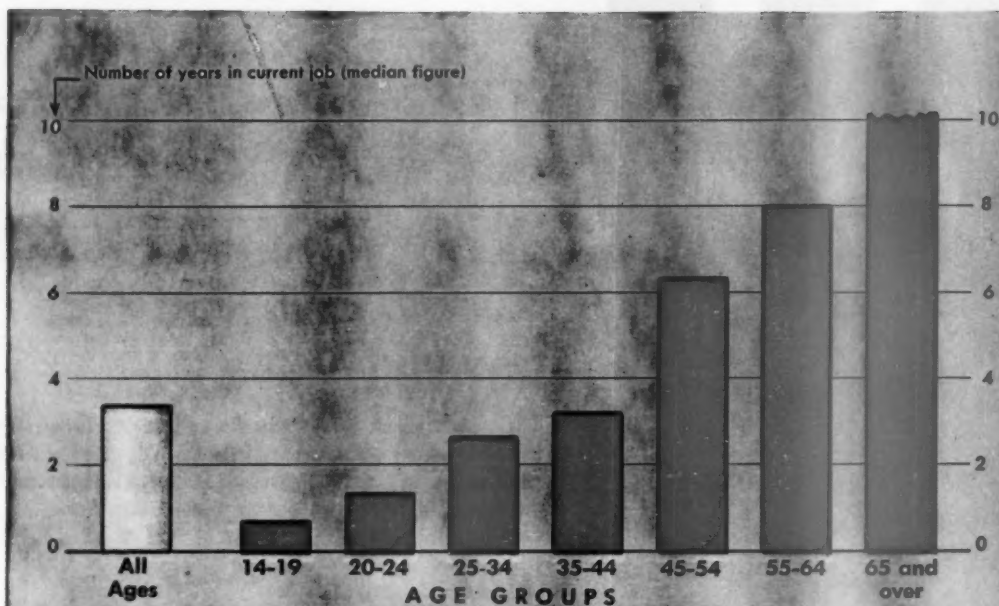
This case history carries a clear meaning for every industry, every manufacturing process. It says you solve capacity problems by applying capacity thinking. We want to do this kind of thinking with you and your engineers.

to produce more

You can choose the actual devices later. It's how you put them together that counts—whether meters, relays, generators, switchgear or welders. Many manufacturers make good electrical devices. Westinghouse, in fact, makes a broader line than anyone else. But the priceless ingredient Westinghouse offers you, in addition, is the skill of broadly experienced engineers in putting together the right combination of good devices to let you produce more with what you have. Westinghouse Electric Corporation, Pittsburgh, Pennsylvania.

*name on request

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1 Older workers stay longer on the same job...

Charts to Guide Future of Pensions

How much further can employer-paid pensions expand through industry?

A new Bureau of the Census survey is a beginning in the search for an answer to that question. With broad-brush strokes it paints the picture of worker movement from one employer to another within the U.S. labor force. The first general conclusion to be drawn from it: There's more such turnover than is commonly supposed. And its implication is that expanding pension systems much further through industry will be prohibitively expensive.

• **Federal**—While the importance to business of the "how much further can pensions go?" question is obvious, it also has an importance to another group: the advocates of increased federal pensions. They've been on the ropes lately, largely because of losing popular support. This loss is attributed to a widespread idea that private industry is taking over the pension job.

The "raise pensions" people are anxious to show that employers will never be able to take over prime responsibility for pensions in many industries. Turnover and mobility, which are essential for a flexible and efficient

labor market, prevent workers from building up required service credits without which present employer-paid pensions are impossibly costly.

The Census Bureau's survey helps to make their point.

It shows that such factors as age, sex, race, and industry help determine how long workers have remained in their present jobs (see charts).

• **Effect of Years—Age** seems to be a major stabilizer (Chart No. 1). The bureau says that 51% of men and 31% of women over 55 have been on their jobs since before Pearl Harbor. This suggests that opportunities for older workers are limited. And it indicates that they value benefits of long tenure. At the other end, young people haven't stayed so long, partly because many of them haven't been working at anything for long and partly because they tend to move around.

Men have been on their jobs longer than women (Chart No. 2). There's only one exception. More women—proportionally—who got jobs in hard goods manufacturing during the war are still in them.

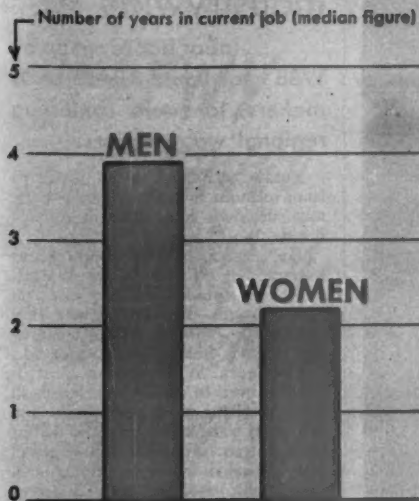
The main reason whites have stayed on their jobs longer than nonwhites

(Chart No. 3) is that many nonwhites are limited to jobs that are casual, seasonal, or part time. This is even truer in agriculture where, against 25% of whites who have held their jobs less than one year, the nonwhite figure was 40%. It would be almost impossible to work out an employer-paid pension plan for this group of nonwhites, many observers hold.

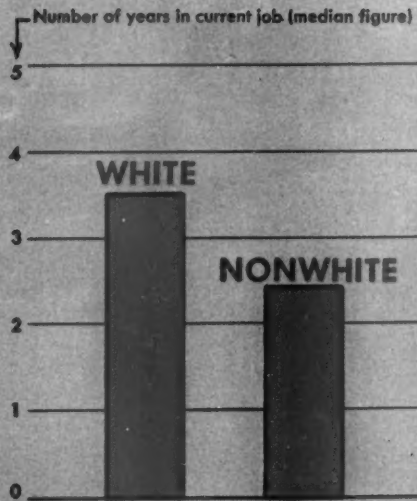
• **Services**—The pension problem is clearly defined on an industry by industry basis (Chart No. 4). Employees have stayed longer on jobs in utilities and government than in services and distribution. These industries are more stable by their nature, while services and selling use a lot of part-time and seasonal help. Where average tenure is long, employees can build up service credits, so it's simpler and cheaper to set up pension programs.

Employees also tend to stay longer where their length of service gives them benefits.

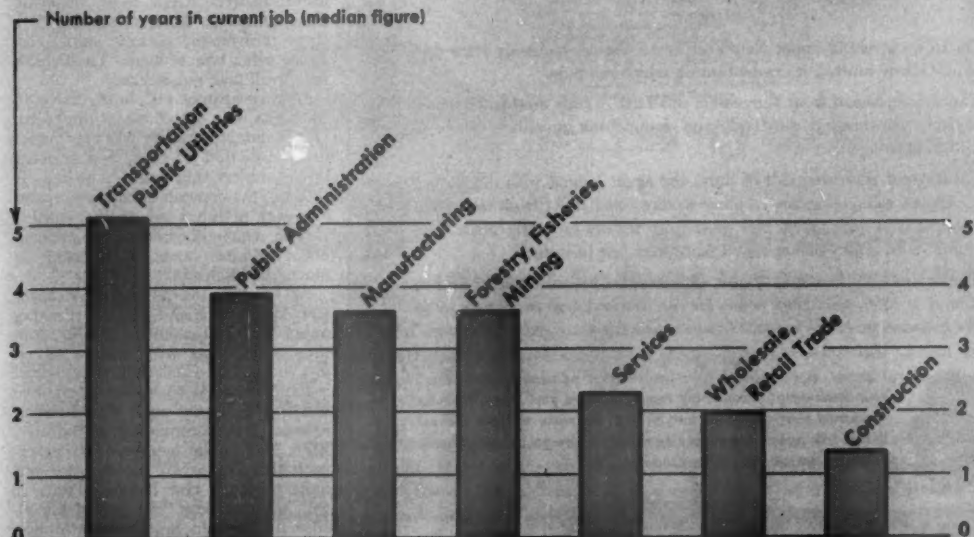
The figures showing that construction workers don't stay long on a job are misleading. Once a building is up, that job ends. But most construction workers have a long tenure in their trade.



2 Men stay longer than women...



3 Whites stay longer than nonwhites...



4 And how long a job lasts varies industry by industry

Data: Bureau of the Census.

© BUSINESS WEEK

AN ACTUAL CASE FROM THE FILES OF U. S. F. & G.



"I FOUND A FRIEND . . . 1300 miles from home"

On an icy street in upper New York State, the car suddenly started to skid. Out of control, it crashed into a telephone pole.

The driver, a man from Tennessee, was hurt . . . his mother seriously injured. He needed a friend, and found one quickly—the local U.S.F. & G. agent.

Far beyond the usual call of duty, the agent helped with the details . . . phone calls, telegrams, a place to stay—and relief from worry. All medical bills were taken care of and car repairs promptly made. The U.S.F. & G. policy meant much more than just insurance.

The driver's appreciation is best expressed in his own words: *"When a man is 1300 miles from home, his car wrecked, and one passenger in the hospital, he needs friends. I found such friends in your Company."*

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Industrywide . . .

... labor board set up by WSB for auto and parts makers, to avoid conflicting regional wage rulings.

Nothing can gum up an industry's labor relations as much as contradictory wage decisions from different regional boards.

The National War Labor Board learned that early in World War II. So it concentrated industry cases in special boards—no matter where they originated. Now the Wage Stabilization Board is doing the same thing.

Last week WSB announced it is turning over to its Detroit board all cases involving nine major auto and auto-parts companies with headquarters in Michigan. The Michigan regional board, headed by M. S. Ryder, will process the cases and write decisions. Thus, it will unify decisions and interpretations on wage policy in the auto industry.

• **All Divisions**—At the start, its jurisdiction will cover all operating divisions of General Motors Corp., Ford Motor Co., Chrysler Corp., Nash-Kelvinator Corp., Hudson Motor Car Co., Kaiser-Frazer Corp., Packard Motor Co., Briggs Mfg. Co., and Murray Corp. It won't matter where cases involving these companies arise, or whether they cover refrigerator, aircraft, auto parts, or any other type of work. The Detroit board will take jurisdiction.

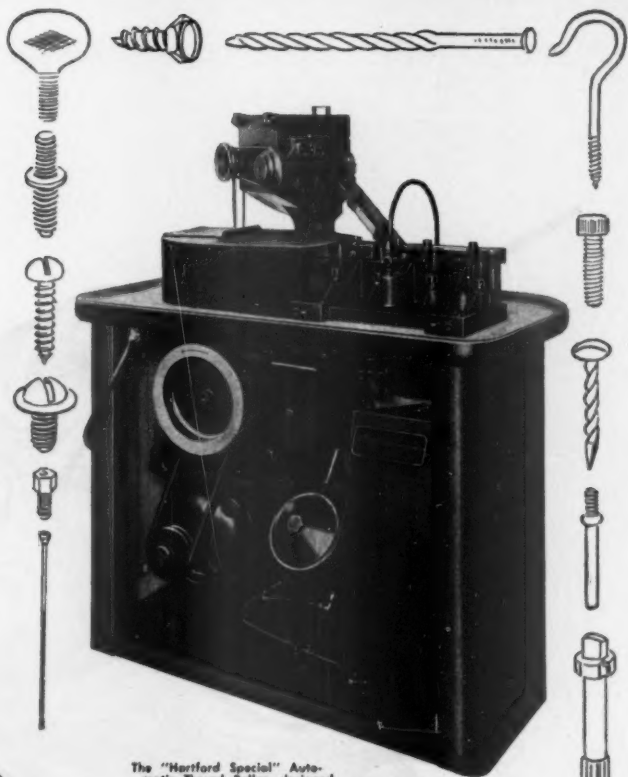
Only companies with headquarters in Michigan were placed under the board. Out-of-state companies will stay under the jurisdiction of their own regional boards—unless they want to switch. If they do, the companies and unions can file joint petitions asking the change. If their regional board and the national board approve, cases then could be moved to Michigan.

At least for the present, Studebaker and Willys-Overland—two of the big out-of-Michigan companies—will continue filing cases with boards located in Chicago and Cleveland, respectively.

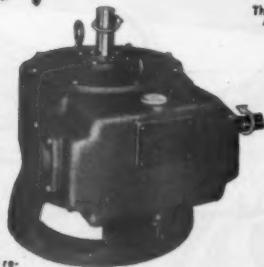
• **Experience**—A tripartite automotive section is being set up in the Michigan regional board, composed of industry, labor, and public members. Ryder expects this section will assure faster and more thorough case handling, since it will bring to bear "the special knowledge its members have gained through years of close association with, and experience in, the automobile industry."

The Michigan board now has over 50 cases involving the nine companies. This figure will rise as other regional boards send in cases relating to divisions of the Michigan companies.

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because
it SAVES
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This Eberhardt-Denver speed reducer weighs 112 lbs. Others weigh up to 1500 lbs. 80 stock sizes made for you. Stocked by distributors throughout the nation.

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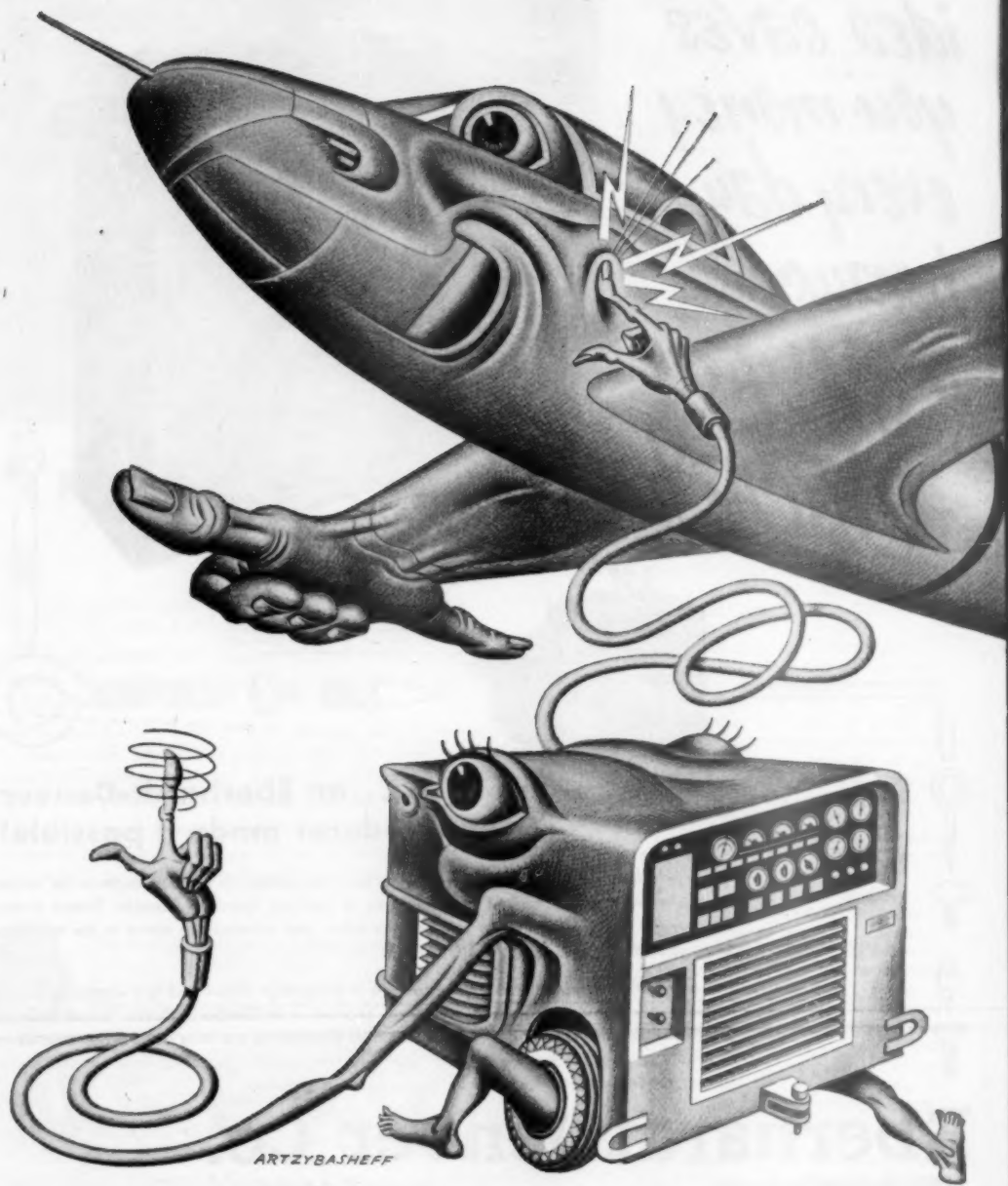
You save quite a lot when you buy a refrigerator, automobile, or a radio, because the screws used in it are rolled instead of cut—rolled by a Hartford Special Automatic Thread Roller. You buy the finished product for less because labor and material are saved in the manufacturing process.

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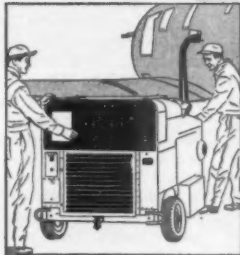
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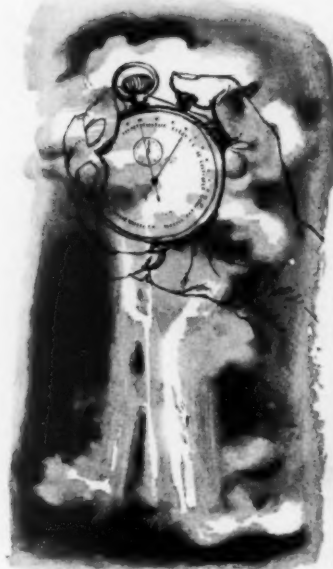
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UNION TURNS THUMBS DOWN on fact-finding board's recommendations in rail dispute. Union chief D. B. Robertson (left) and general counsel Harold Heiss contemplate...

New Labor Woes for Railroads

Brotherhood of Locomotive Firemen and Enginemen says emergency board's recommendations are not good enough. It is showing new signs of restlessness.

The government's hopes of ending its seizure of the nation's railroads faded out again this week. The reason: a new flareup of railroad-labor relations where the "snafu" has been growing for 10 years (BW—Feb. 17 '51, p. 130).

The government seized the railroads a year and a half ago, on Aug. 28, 1950, to prevent a strike by operating unions. Nominally, it has been running them ever since, awaiting settlement of a welter of wage and work-rule disputes through labor-management bargaining.

• **Adding Fuel**—Now the important Brotherhood of Locomotive Firemen & Enginemen has rejected an emergency board's recommendations for a settlement in what is the key dispute.

At the same time, the Brotherhood of Locomotive Engineers and the Order of Railway Conductors has begun pressing harder for settlement of demands dating back to 1949. They want a substantial wage increase, a 40-hour week, and major changes in work rules.

• **Severest Test**—The new flareup increases the already serious strains on the Railway Labor Act. If a new crisis comes, even the fact that this is an election year will hardly keep the act from getting a going-over in Congress.

The principal complaint now is that rail labor disputes are handled by government intervention rather than collective bargaining—and that neither is effective in achieving settlement.

Take the last year, for instance. There have been few signs of direct bargaining. Instead, there have been futile recommendations by two Presidential boards; a "settlement" arranged at the White House in December, 1950, and repudiated by the unions; \$101,000 in fines against the Trainmen for violating an antistrike injunction; and an investigation and report by the Senate Labor Committee.

Looking over the past year, month by month, you can see what has, or rather hasn't, been accomplished.

February: On orders of President Truman, the Army broke a 10-day strike of switchmen members of the Brotherhood of Railroad Trainmen, threatening discharges. The Army put into effect a token wage increase of 12½¢ for yardmen and 5¢ for operating personnel, retroactive to Oct. 1, 1950.

In the same month the Senate labor committee opened hearings on the dispute. Meanwhile, the Trainmen were

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Tennessee's products are used by industry and agriculture throughout the country... in every state from Maine to California.

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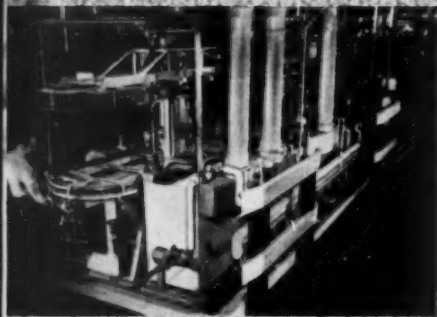
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fined \$75,000 in Washington and \$25,000 in Chicago federal courts for "sick" stoppages in December in violation of a strike injunction.

March: One-million nonoperating workers settled at the White House for a 12½¢ raise, a cost-of-living escalator clause, and "annual improvement" raises after July, 1952.

The Bureau of Labor Statistics price index gave nonoperating railroad workers a 6¢ increase under the new escalator contract.

And the unions rejected the railroads' offer to accept any person named by Truman as arbitrator under the White House's December "memorandum of agreement."

April: The only development during April was conclusion of the Senate committee hearings.

May: The Trainmen settled, accepting the original White House terms of a 33¢-an-hour increase for yard workers, 18½¢ for roadmen, a cost-of-living escalator, a moratorium on wages and rules changes until Oct. 1, 1953, and a 40-hour week "in principle" for yardmen. The Trainmen agreed that, instead of Steelman, a referee to be named by Truman would decide two rules disputes that could not be settled through direct negotiation.

June: The Firemen, Engineers, and Conductors unions rejected the settlement terms accepted by the Trainmen.

Also in June, the Senate Labor Committee majority rebuked Truman for saying union leaders acted like a "bunch of Russians" in rejecting the White House "settlement," criticized Steelman's role, asserted that White House handling of the dispute put the government on the side of operators. The minority, including Sen. Taft, on the other hand, criticized the majority as lacking objectivity, possibly hampering a settlement.

July: At this point, the Firemen began taking a strike vote. And the National Mediation Board sent the deadlocked dispute back to Truman.

October: The Trainmen were fined \$1,000 by a federal court at Cleveland for violating an injunction in connection with the 10-day strike of switchmen in February.

Firemen notified 75,000 members to prepare for a possible nationwide strike.

November: On Nov. 6 the Firemen gave two days' advance notice of a strike against four major railroads. The same day, Truman appointed an emergency board to hear the dispute, thus averting a strike for at least 60 days.

On Nov. 27, a three-man board, headed by Dr. Carroll R. Daugherty, began hearings. The Firemen refused to participate, objecting to one of the board members.

December: The emergency board concluded hearings in the Firemen's

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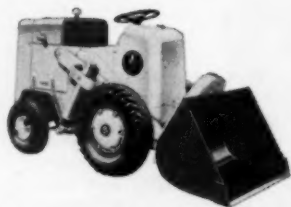
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The "PAYLOADER" is an established profit-maker in every industry where dirt or bulk materials are handled. Thousands of these special tractor-shovels are saving time, costs and labor for contractors, mines, quarries and all types of plants.

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dispute on Dec. 17. Another emergency board, headed by David L. Cole, began hearings on union-shop demands of 17 nonoperating unions.

Meanwhile, the Army rejected a plea of Conductors that it help get their dispute arbitrated, pointing out that its authority is only to operate the railroads.

January: The Trainmen and railroads agreed to let Secretary of Labor Tobin settle any disputes over shifting from a 48-hour to 40-hour week for yard service employees.

On Jan. 25, the Daugherty board recommended that Firemen accept virtually the same terms accepted by Trainmen and nonoperating unions.

Three days later, on Jan. 28, D. B. Robertson, president of the Firemen's union, announced that the union's negotiation committee had rejected the new recommendations. He condemned the board for carrying out White House wishes to force acceptance of the plan rejected earlier. Firemen object particularly to a delay in the 40-hour week and to recommendations on four working rules.

LABOR BRIEFS

In-plant preaching cost a Cincinnati minister his weekday job at Trailmobile Co.—but the United Auto Workers (CIO) is demanding his reinstatement. The union claims his "free speech" rights were violated. The minister gave sermons daily, before his shift and at lunchtime.

A \$1.2-million suit against the AFL ladies' garment union in Philadelphia claims the union drove a shop out of business. The suit charges that the union illegally demanded that the plaintiffs hire only union workers and, when they refused, "conspired" to make them lose plant and equipment.

No rise in funds is due this year for the Senate labor subcommittee headed by pro-labor, anti-T-H Sen. Hubert Humphrey. His group asked for \$105,000 so its activities could be broadened this year (BW—Jan. 26 '52, p.30). Sen. Taft opposed an increase, and got his way.

A 15-month strike against Empire Zinc by the Mine, Mill & Smelter Workers ended in an agreement on a 24¢ raise, additional fringe benefits.

An aluminum dispute over CIO and AFL demands for 18½¢ raises is now in the hands of WSB. Unions representing 25,000 Aluminum Co. of America employees agreed last week to forego scheduled strikes and let the board try to settle the dispute.

TURNING IDEA-CHEMICALS INTO DOLLARS



How working up a better lather helped a shampoo maker lower costs

Sometimes there's an idea for a better product at lower cost in buying a versatile chemical, and then changing it to meet your needs. For instance, a shampoo maker wanted to improve lather action, yet keep costs down. He experimented with "Lorol" 5, a fatty alcohol made by the Du Pont Polychemicals Department, from which he produced "an economical detergent with ideal lather for shampoo."

This idea—using "Lorol" 5 as an intermediate—may help you lower costs, too. "Lorol" 5 is also valuable in making synthetic rubber, pharmaceuticals, petroleum and textile products. And considering the other five Du Pont "Lorol" fatty alcohols,

there are profitable uses in the leather, cosmetics, paper and plastics industries.

Untapped possibilities for "Lorol" include use as an ingredient in inks, a softener and tackifier in adhesives. Its promise is typical of the more than 100 other chemicals and plastics made by the Polychemicals Department.

Which chemicals and plastics offer you the greatest opportunities? We will gladly send you a booklet containing bulletins on the Polychemicals Department products used in your industry. Each bulletin gives information on uses and possible applications, specifications, packaging, bibliography and technical data. For your

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DEPARTMENT

CHEMICALS • PLASTICS

PRODUCTION



1 Boeing, short of engineers, uses them only for really technical work. Such chores as drafting are done by youths like Richard

M. Heeter (right), an art student who learned drafting in the company's special eight-week training course.



4 Mass aptitude test followed the first interview. Heeter's art training gave him a hand up on blueprint work. Applicants were of all ages.



5 Blueprint training takes up five weeks of course, engineering the other three.



2 "Earn while you learn" slogan attracted Heeter and a lot of other applicants for Boeing training.



3 Heeter passed aptitude screening by a company personnel engineer who has the final say on all applicants.

How to Beat the Engineer Shortage

Industry has finally come face to face with the fact that the shortage of engineers is a serious production problem—not just a variable statistic to toss around.

On top of that, it is clear that the shortage is not going to cure itself in the next few years (BW—Sep. 29 '51, p74). Between 40,000 and 60,000 more engineers are needed now; that figure is unlikely to shrink much before 1960, if then.

That leaves industry with a double-barreled problem:

- How to keep production rolling, even though engineering departments are undermanned.

- How to get more engineers into the industrial pool so that the shortage won't last forever.

A BUSINESS WEEK survey of major companies all over the country this week shows that industry has a pretty good idea how to solve both problems. But the survey also shows that only a few isolated companies are taking ad-

vantage of the solution that they know exists.

- **Double Action**—The program that industry knows but hasn't generally adopted consists of three major parts. The three dovetail together, and they help industry get through the current shortage at the same time that they encourage future recruitment. Here's the program:

- **Efficiency.** Making good use of existing engineers can take a lot of the bite out of the shortage. There's not much sense to having a graduate engineer doing a chore that a reasonably bright high school product could handle. But a lot of companies still use engineers for just about everything but sweeping the floor.

- **Upgrading.** If engineers are taken off jobs that call for mere semiskills, a lot of vacancies are created. Bright but untrained personnel can be moved into the holes. And, with some in-plant training, you are likely to end up with a bonus of highly skilled workers, a few

candidates for engineering training.

- **Recruiting.** Going back to the high schools to drum up more candidates for engineering training is the way to line up an adequate supply of engineers for the future. Industry has been doing this in two ways: Both teachers and students are approached. Teachers are taken on plant tours and otherwise persuaded that engineering offers a bright future. If it works, the teacher will guide some hopefuls into the field. At the same time, the company tries to sell the pupil directly, with a cheery picture of the prospects and a tush-tushing of the difficulties of technical courses. If the student doesn't plan to go to college, he's told about the chances of advanced training while he learns his job.

The whole program meshes together. The more you can relieve the engineer of routine chores, the better he will like it. And the better his job will look to students cherishing a career.

There's more to it than that. When the engineer vacates his lesser chores,

a message for everyone concerned with critical metals, in and out of government.

are we short of critical metals?



Light Thrown on a Crucial Subject

The gleaming polished canopy plate adds to the charm of this light fixture. That it can still be purchased is due in part to Nickeloid copper plated steel. The part formerly was made from solid copper. The light fixture is equally attractive; yet solid copper has been conserved by use of the pre-plated pure copper coating. As an alternate for solid copper which is in such short supply today and unavailable for many purposes, why not consider pre-plated copper steel or other Nickeloid Metals?

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We save by plating critical metal finish to a non-critical base metal.

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PRE-PLATED
METALS**

Nickel, Chromium, Brass, Copper Finishes Electro-Plated to all Common Base Metals—in Sheets, Coils, Plated One or Two Sides—in a Wide Range of Gauges and Tempers.

these are turned over to someone who finds them a fascinating promotion.

• **Who Does What**—There's an enormous gap between the program and the actual performance of the bulk of industry. Nevertheless, *BUSINESS WEEK*'s survey came up with some cases of companies that were campaigning briskly and intelligently to get more engineers.

As might be expected, fast-expanding industries like aircraft and electronics are taking the most drastic steps in the care and feeding of engineers. More static industries—and especially companies that need only half-a-dozen or less engineers—are meeting the crisis by looking the other way.

• **In Schools**—A number of companies are concentrating on getting the school-boy headed toward engineering. In Buffalo, N. Y., Sylvania Electric Products Corp. has teamed up with other local companies to circularize all schools on the opportunities of engineering, the type of work it offers, what it requires.

Chicago high school students attend panel discussions sponsored by the Chicago Technical Council, an organization representing all engineering societies in the city. The seminar, called the Chicago-Area Career Conference, is promoted by the Sun-Times and is held at the Illinois Institute of Technology. Leaders in business, industry, and professional life guide the discussions, which give the students firsthand pictures of the working day of, say, a chemist, geologist, or a tool engineer.

Allis-Chalmers Mfg. Co. prefers to stalk the student through his teachers. Groups of teachers are taken on plant tours, shown movies of the company's products at work, and given a chance to ask questions. The idea is that the interest aroused in engineering—and Allis-Chalmers—will be passed on to the students.

• **Special Bait**s—Some companies figure that when a boy leaves high school he must head for either college or a job. Either way, the canny company can snare him if he has been sold on engineering. Some aircraft companies offer jobs like drafting that require only limited training.

Harnischfeger Corp. annually takes on a dozen of the top graduates from Milwaukee's high schools. The group goes through six months of indoctrination and screening; then the company picks perhaps three for a three-and-a-half-year training course in its 10 departments. The same company is thinking of offering financial aid to enable skilled workers to get college training.

Boeing Airplane Co. works the slogan "Earn while you learn" hard. Its classified ad for student draftsmen brought a swarm of applicants (pictures, pages 46, 47). Boeing's eight-week course costs the company \$500 a stu-

dent, but eases the shortage of skills, releases engineers for higher duties.

Plans for fitting engineers into the topmost possible bracket of their skills are spreading. Bell Aircraft Corp., for example, has freed its engineers from all routine paper work and administrative detail. That's a big help, with Bell needing three times as many engineers now as it did at the peak of World War II.

• **Salaries**—In the business of keeping engineers happy, there are about as many approaches as there are companies. Legal ceilings, of course, prevent the use of high salaries as bait. Mostly, though, companies are giving what boosts the law allows, with physics and electronics specialists getting a bit better than others.

One chemical company makes its engineers feel secure by holding down the size of the staff. Excess work is farmed out; and the regular staff knows it won't have to be fired when the end of the boom arrives.

Young engineers are often shy at the drafting and blueprint work that is likely to be their first assignment. Auto and aircraft makers have tried sugar-coating the pill. Detroit calls its newcomers "automobile engineer designers." Some plane makers label drafting work as junior engineering.

PRODUCTION BRIEFS

Domestic mica is converted into high-grade sheet form by a machine developed by General Electric's chemical division. This should be good news for electrical and electronic manufacturers who have had to rely on foreign sources of the insulating material. GE plans to get the machine into commercial production in the next few months.

An electric locomotive, being tested by Westinghouse and Pennsylvania R.R. combines the economy of a.c. power with the simplicity of d.c. motors. The engine uses electronic rectifiers, called ignitrons, which change the a.c. into d.c. That eliminates the costly motor-generator gear of ordinary locomotives.

Gold replaces copper for plating the ice trays of Servel, Inc.'s refrigerators. The plating, called anodizing, puts a very thin coating of the metal on the trays to prevent rust. "Gold costs more, but it gets the job done," says W. Paul Jones, Servel's president.

Silicone capacity of Dow Corning Corp. is expanding at a cost of over \$13-million, the third increase since 1944. The program includes a big boost in the output of silicon rubber.



Clean Air and School Children



Our school children are the nation's most precious asset. They deserve the best of everything we can give them—including the air they breathe. In many modern schools clean air is provided for them by Herman Nelson DRAFT|STOP Unit Ventilators. These automatic units clean, heat and circulate air without drafts. Better air means better health—better environment for learning—the birthright of every American school child.

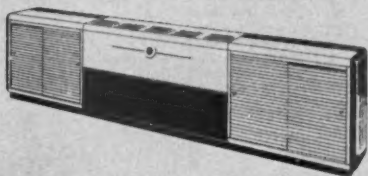
American Air Filter

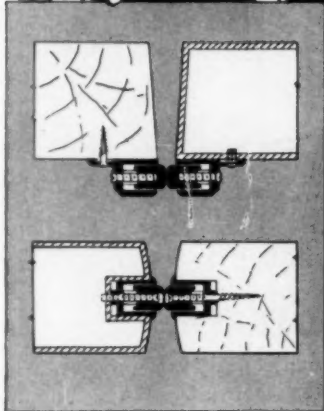
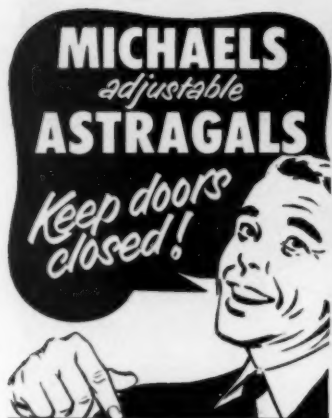
COMPANY, INC.

HERMAN NELSON DIVISION

Moline, Illinois

The DRAFT|STOP Unit Ventilator intercepts cold air from the windows before it has a chance to spill into the classroom and cause drafts.





Write today for information and prices on Michaels Adjustable Astragals. Made of extruded bronze, aluminum or nickel, they are simple, practical, rugged, easily installed and adjusted, and available in several styles. Two are shown above. Type A (top illustration) may be applied to either wood or hollow metal bevel doors. Also used as a stop bead. Type E (lower illustration) is for bullnose hollow metal or wood double acting doors. Both types may be used at the bottom of doors. Michaels Astragals help keep doors closed tightly . . . eliminate drafts and air currents . . . keep out dirt and dust. Write for details.

OTHER MICHAELS PRODUCTS:

Bank Screens and Partitions	Stair Railings (cast and wrought)
Welded Bronze Doors	Wrought and Cast Radiator Grilles
Elevator Doors	Grilles and Wickets
Store Fronts	Kick and Push Plates
Lettering	Push Bars
Check Doors (standing and wall)	Cast Thresholds
Lamp Standards	Extended Thresholds
Morgues	MI-CD Parking Meters
Tablets and Signs	Museum Trophy Cases
Home Plates	

The MICHAELS ART BRONZE COMPANY, Inc.
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Manufacturers since 1878 of many products in bronze, aluminum and other metals



OLD WAY To check coating of tin on tinplate, J&L used to punch a sample from a finished coil (left), have it chemically analyzed in lab (right).



NEW WAY X-ray gauge continuously records thickness of tin as the plated sheet moves along the electrolytic tinning line without a stop. Thus . . .

X-Ray Eye Saves Inspection Losses

Jones & Laughlin Steel Corp.'s new X-ray inspection of tinplate for food cans stands to save the company time and money in inspecting tin plating—and to help conserve critical tin.

The old way of checking samples of finished tinplate tied up the tin line operation for 15 min. per inspection (pictures). Now the electrolytically plated sheet is checked continuously.

It's done with X-rays. The rays create fluorescence in the steel sheet itself, not

the plating. The plating absorbs some of this fluorescence, depending on its thickness. The X-ray gauge measures this absorbed fluorescence as the tinplate speeds by. It scans the coating at any desired point and indicates, in millionths of an inch, the tin thickness at that point.

With this constant check of plating thickness, the operator can immediately make adjustments in case he notes any variation.

Bubble Bath . . .

. . . of air under pressure strips grease and colloids from liquid wastes in a wide variety of industries.

During the war your wife probably saved dribbles of fat to trade to the butcher for red points. While she was saving ounces, millions of pounds of badly needed greases were going down the drains every day at meat packing plants.

There wasn't much the packers could do about it, either, with the recovery equipment then available. But now that waste need never happen again. Bulkley, Duntun Pulp Co., Inc., New York, has developed new recovery methods using dissolved air. BD's Colloidair equipment just about solves the lost grease problem; it offers other advantages, too, and for more industries than packers.

• **Side Profit**—Take the case of the Luer Packing Co., Los Angeles. With the old style settling basins, Luer used to recover from 25% to 30% of grease from plant wastes. With Colloidair, 90% is recovered—and sold at a tidy profit to glycerin and soap makers.

That's not all. Luer dumps its liquid wastes into the Los Angeles sewer system. The excess grease used to plug up the mains, and the city forced the company to pay for a twice-a-year cleaning of the sewers. There's no more trouble now.

• **Used in Mining**—There's nothing new in the principle BD uses for Colloidair; it has served the mining industry for ore beneficiation. What is new is the application method, which works this way:

Air is dissolved into the liquid waste under pressure; it actually dissolves as a lump of sugar would. When the pressure is relaxed to ordinary atmospheric degree, millions of tiny air bubbles are released. They swirl up like the bubbles of carbon dioxide when you open a bottle of carbonated beverage.

As the air bubbles float to the surface, they latch onto tiny solid particles in the liquid waste and saturate larger clumps. The bubbles carry the solids to the surface, as a tire tube supports a swimmer. After that it's easy to skim the solids from the surface.

Just bubbling air into the liquid, without pressure, wouldn't float the solids. About all it would do is stir up the mess.

• **Colloids, Too**—BD's system also works with colloid wastes—gelatinous solids that dissolve in liquids. You can't filter them out and they won't settle to the bottom of a tank. Clue is



President Aleman Dam brings new life to Mexico's Butterfly Basin

FOR centuries, the gentle name of the Papaloapan (Butterfly) River Basin in lower Mexico has been bitterly ironic. Its frequent floods spread disease and destruction from mountains to Gulf. Because the soil was rich, men have always lived there, though gambling with the water. But they have always lost. Of nearly a million people in the basin in 1947, only 2 in 10 owned shoes, only 3 in 10 could read and write. Average life in many localities was only 29 yrs.

Now, that dismal basin has become a Promised Land. Under direction of the Comision del Papaloapan, old towns have new life. Land has been reclaimed. Settlers and investors flow in. When completed in 1953, the President Aleman Dam, largest in Latin America and keystone of the vast \$300,000,000 reclamation program, alone will: (1) Prevent floods which cause almost \$600,000 damage annually. (2) Straighten and deepen the river, doubling water capacity and improving navigation. (3) Generate 150,000 kw. for household and industrial power. (4) Store 8500-million cubic yards of water to irrigate about 300,000 acres of arid wasteland.

The dam will actually be two giant earth and rock walls. The first, called "La Cortina", will shut off the flow of

the Tonto River at Temaxcal, the second, known as "El Dique", will close a pass through the mountains, 1½ miles north of La Cortina.

Constructors "El Aguila" assigns 6,700,000 yds. to 32 LeTourneau units

Earthmoving for both is being handled by Constructors "El Aguila", S. A. of Mexico, D. F. Their 32 LeTourneau rubber-tired machines which were driven to the job, are handling 57% of the total 12 million cubic yards to be moved. Some came 1130 mi. through highway traffic from Laredo, Texas, in 68 hours, total driving time.

In discussing the operation, Jose Bertran Cusine, president of the firm, said, "We are very much satisfied with the performance of our Tournapulls and Tournadozers. They're the best earth-moving equipment we own. For rock work, our Tournarockers are excellent. With them, we increase the amount of rock moved and lower our costs."

If you have earth to move, ask your LeTourneau Distributor to put you in touch with the owner of the nearest available LeTourneau fleet.

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a colloid. If a gallon of glue were dissolved in 1,000 gal. of water, Colloidair equipment would strip all the glue out in 18 min.

Some solids, acids, and alkalis that dissolve in liquids can't be stripped out directly by dissolved air. But BD can get at them. It adds a chemical that precipitates the material, and then the air bubbles can do their stuff.

• **Rescued Lake**—The BD system has already netted some real savings in communities plagued by water shortage and industrial pollution. At Hammond, Ind., the Lever Bros. Co. has a soap plant located between its Lake Michigan water source and Wolf Lake, a recreational lake in which Lever Bros. dumps its wastes. Over the years, the wastes blanketed the bottom of Wolf Lake with sludge.

Lever Bros. realized that one fine day local authorities would be on its neck to clean up its wastes or stop dumping them into Wolf Lake. Recently, the company installed a Colloidair treatment system. Now the stuff discharged into the lake is pretty clean.

• **Baby Food**—Another case involves a Midwestern maker of jarred baby foods which was disposing of its wastes into the municipal sewage system. In time the lake into which the city wastes were discharged dropped below minimum antipollution standards.

The company cooperated with the state water board and built its own BD

Colloidair system. The municipality was then able to continue with its old sewage treatment facilities. And the company now sells the vegetable solids that it removes from its wastes as cattle and hog feed.

Roundhouse wastes discharged by the Santa Fe Railway Co. used to pollute the Los Angeles River. The wastes included tank car washings containing crude petroleum, asphalt, and fish oil.

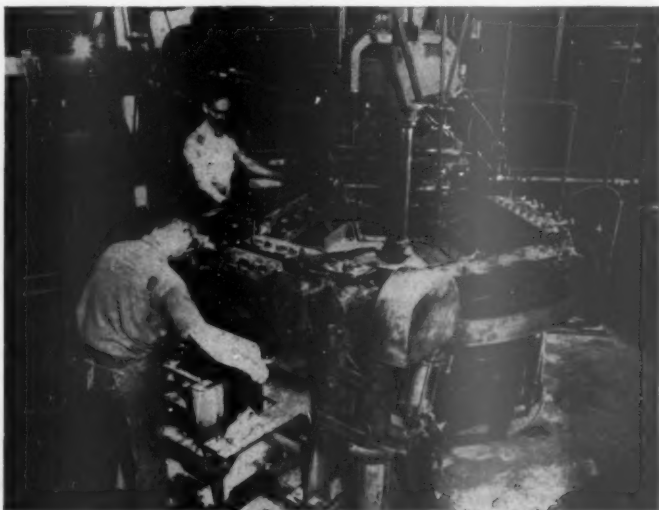
Finally, the city told the Santa Fe to clean up its wastes, or else. In the course of trying just about everything, the company put in a Colloidair on a trial basis. Here are the results:

• The more than 5,000 parts per million of oil and grease in the wastes shrank to zero.

• Other suspended solids were cut from 7,000 parts per million to 26.

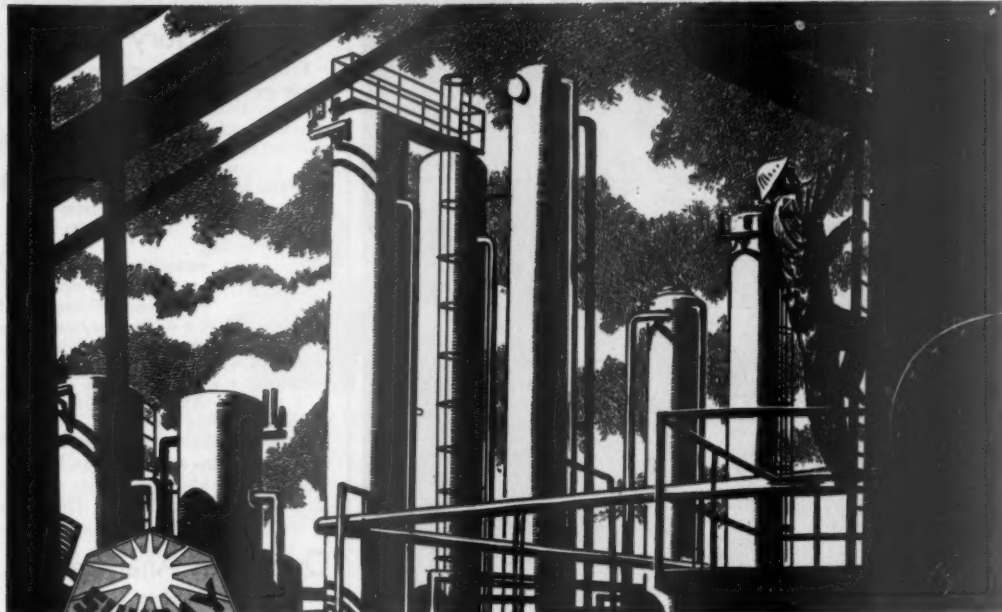
In Detroit, auto companies are using Colloidair to strip up to 98.5% of the emulsified oils in wastes from machine tool cutting fluids. The recovered oils are dumped on coal piles and pay dividends in the form of added Btu.'s when the fuel is burned.

• **Pulp Method**—BD's engineering division manager, Dr. Robert A. Baum, fathered the Colloidair development. He saw the air flotation technique used in the paper industry for recovering fibers. He reasoned that it ought to work in treating liquid wastes. He went to work on his idea in 1949 and it's now paying off for Bulkley, Dunton.



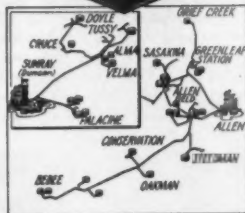
Mechanization Speeds Foundry Jobs

General Motors' Buick division claimed a first in the foundry trade when it installed this core-making machine of Osborn Mfg. Co. The cores for automobile engine castings are usually made by three men in three separate operations. But Buick's machine makes them automatically at 300 per hr., a 600% increase over manual methods.



America's Industrial Greatness

Started With Gasoline . . .



410% Gain Is Shown

SUNRAY is delivering more than 50,000 bbls. of crude oil daily through pipe lines serving its Oklahoma refineries, and has advanced to 9th place among the state's crude oil purchasers and transporters—a 410% gain since 1947. Another 23,000 bbls. is handled through pipe lines which will serve the proposed new refinery at Corpus Christi. The above stylized map shows basic routes of crude lines serving the company's Oklahoma refineries. It is through crude pipe lines that the life blood of the refining industry flows—from the oil well on scattered leases to the refinery processing finished products.

In the early years of the twentieth century, development of the automobile created a new demand for gasoline and motor oils in large quantities. In those days, crude oil was simply heated at the refinery, vaporized, condensed and you had kerosene and gasoline.

Development of high compression engines demanded improvements which refiners met. Even before World War I, new methods for making gasoline had to be found. From that time on, refining processes have kept pace with engine design and manufacture. It will probably be many years before engineers are able to produce an engine so efficient in operation that it can take advantage of every ounce of energy packed into a gallon of today's high octane catalytic-cracked gasoline.

As in other phases of the oil industry, SUNRAY has kept pace with modern refinery improvements. SUNRAY engineers saw the trend to high octane gasolines years ago. Today we are better than ever equipped to supply gasolines, fuel oils, asphalts, and LPG products that meet the exacting requirements of modern industry, the American motorist and the uses of national defense.

SUNRAY operates modern refineries

in Oklahoma and California. The refined products are moved by pipe line and tank cars to major marketing centers and SUNRAY'S refinery output and sales are at record highs.

A new \$10-million 25,000 bbl. refinery is being planned for Corpus Christi, Texas. The company is enlarging its catalytic cracking facilities at Sunray, Okla., and will rebuild and put into production an alkylation unit to produce much needed aviation alkylates for national defense uses. Looking to the future—SUNRAY is fast matching its refinery capacities with its net daily production of crude oil.

Is oil a profitable business? It is . . . to the landowner . . . the royalty owner . . . to oil company employees . . . to oil company stockholders . . . to the motorist and commercial users who benefit from oil's progress . . . and to the community, state and nation which benefit from the industry's substantial taxes. Is oil a profitable business? Yes! What's wrong with that?

FREE — "What's Wrong with Being an OIL COMPANY?" by Ernestine Adams, a most revealing article which "tells a spine a spine". Write for your copy—Address Sunray Oil Corporation, P. O. Box 2039-B5, Tulsa, Oklahoma.



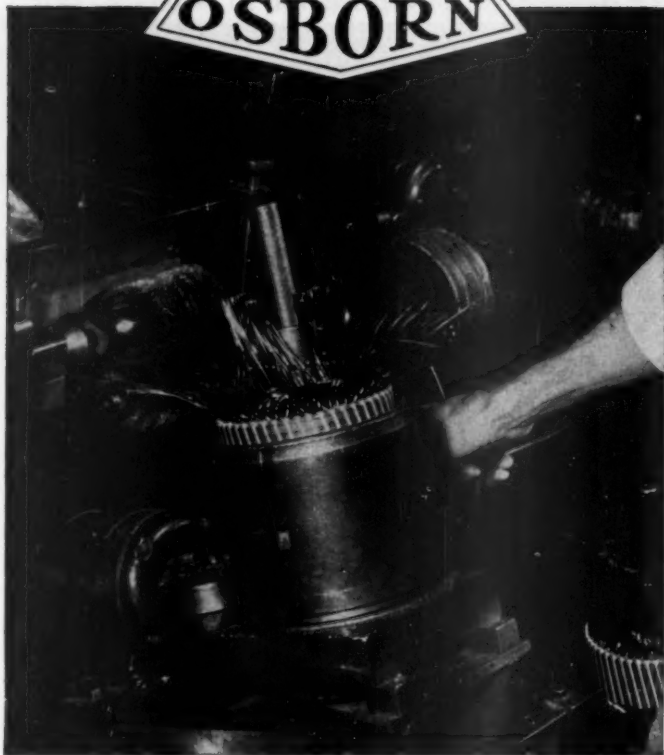
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How to make parts come clean ... at the push of a button

It takes only 8 seconds to remove the enamel insulation from the entire bunch of a motor's coil leads with the set-up shown above. This stripping, preparatory to soldering, is done with Osborn power brushing... automatically... at the push of a button.

Wire stripping is typical of thousands of cleaning operations throughout Industry which have been simplified and speeded by Osborn Power Brushes. Your Osborn Brushing Analyst is experienced in finding solutions to cleaning and finishing problems of all kinds.

His service is backed by the extensive engineering facilities of Osborn, to devise brushing methods and special machines to help you. There is no obligation. Call today or write *The Osborn Manufacturing Company, Dept. 608, 5401 Hamilton Avenue, Cleveland 14, Ohio.*

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OSBORN POWER, MAINTENANCE AND PAINT BRUSHES AND FOUNDRY MOLDING MACHINES

NEW PRODUCTS

Cutting Factory Noises

Fatigue and inefficiency are often the results of noisy working conditions. But in a plant or machine shop it's not easy to soundproof a ceiling, because of obstructions such as hoists, steam lines, and heating ducts. Owens-Corning Fiberglas has designed some acoustical baffles which hang vertically from wires on the ceiling. They can be hung from any ceiling.

The baffles, measuring 24 in. by 48 in., are completely enclosed in a printed plastic film. This film covering acts like the head of a drum, and transmits sound by vibration into the Fiberglas board. Owens-Corning claims the baffles insure a noise reduction of from 30% to 60%. An Ohio machine company, now testing the baffles, says this reduction in noise both reduces fatigue of the workers, and improves hourly output 5% to 14%.

• Source: Owens-Corning Fiberglas Corp., Toledo, Ohio.

Quick Gas Analyzer

It's hard to analyze complex mixtures of gases and liquids—a job you have to do in the chemical, biological, and petroleum fields. The instrument that makes it easy is an expensive machine called a mass spectrometer.

Now Consolidated Engineering Co. has come up with a mass spectrometer that costs much less than the usual machine. It gives you accurate quantitative analyses of gases and light liquids. It will also measure the ratio of stable isotopes in samples of gas.

• Source: Consolidated Engineering Corp., 300 N. Sierra Madre Villa, Pasadena, Calif.

• Price: \$20,000.

NEW PRODUCTS BRIEFS

An Electronic Dynamic Classifier, made by Toledo Scale Co., quickly weighs and classifies containers coming off a conveyor into as many as eight weight groups. It handles containers of material in the 4 oz. to 10 lb. range.

A wood-framed window has three panes that open out like awnings so that you can wash inside and outside from the inside. Buy it from Ludman Corp., P.O. Box 4541, Miami, Fla.

Torn flaps on corrugated boxes can damage your product. Now you can get a corrugated carton called Tufedge with flaps that are virtually tearproof, says Shelton Mfg. Co., Inc., Newark, N. J.

U. S. PRODUCTION DRIVE TURNS SPOTLIGHT ON TRAINED MEN

Chrysler Corporation's program helps people build better products and better careers for themselves

George Heyer, noted magazine photographer, turns his camera for this picture story on a program of importance to American production—how people learn to build military vehicles, defense weapons, and the cars and trucks that play a vital part in American life.



Heyer's pictures were made in Chrysler Corporation factories, classrooms and training shops. He shows a few of the thousands of men and boys who are now taking part in Chrysler's widespread training and technical education program.



TOMORROW'S CRAFTSMAN. Heyer snapped intent young Robert Churason of a Chrysler Corporation employee—during one of his first lessons in how to use tools and make useful things. In special workshops set aside by Chrysler, Robert and other boys work in wood, leather and metal under the guidance of veteran Chrysler artisans. Then they borrow from a "Library of Tools" and finish projects at home.



"A GOOD MACHINE DESERVES A GOOD MAN, SON." Albert Bazner learns about grinders from veteran machinist H. A. Nelson. For the past year Albert has been in an Apprentice Group in Chrysler's Industrial Education program, learning the machinist trade—at good pay. Chrysler helps ambitious employees move up to better jobs. Even high school and college students can learn jobs before graduation, earning both classroom credits and pay. Good training for good men pays off in better cars and trucks—and in such defense work as jet engines, too.



THEY THINK IN CLAY. In this clay model room at Chrysler Institute of Engineering, employee students D. M. Holiday, *left*, and Paul R. Diehl study body design with Engineer Carl Hood. The Institute is the most advanced part of Chrysler's education and training program. Courses compare with those in leading engineering colleges. At Chrysler, employees find training to improve themselves . . . become more valuable to America now when production need is great.

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engineers and builds PLYMOUTH, DODGE, DE SOTO, CHRYSLER CARS & DODGE TRUCKS

Chrysler Marine & Industrial Engines • Oilite Powdered Metal Products • Major Parts & Accessories • Air Pump Heating, Cooling, Refrigeration • Cycroweld Adhesives & Building Panels

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*"...lifting the medium to a new high in maturity and usefulness..."*JACK GOULD, N. Y. TIMES

*"...will revive the old-fashioned custom of passing Sunday afternoons at home..."*HY GARDNER, N. Y. HERALD TRIBUNE

*"...comes closest to the ideal of video journalism..."*EDITOR & PUBLISHER

*"...the best program of its kind that I have ever watched..."*HARRIET VAN HORNE, N. Y. WORLD-TELEGRAM & SUN

*"...at once fascinating and provocative...a maximum flair for showmanship..."*VARIETY

*"...nothing short of spectacular..."*PHILIP HAMBURGER, THE NEW YORKER

*"...destined to be one of the top news documentaries of our time..."*RADIO DAILY

*"...television's best and liveliest news show..."*TIME

AMBASSADOR FOR TELEVISION

Just when you think television has settled into a predictable pattern, along comes a program like "See It Now". . . one that jolts you into acknowledging that television's horizons have barely been sighted.

This program quite simply and logically offers a *television* solution to a particular problem—reporting and interpreting the news.

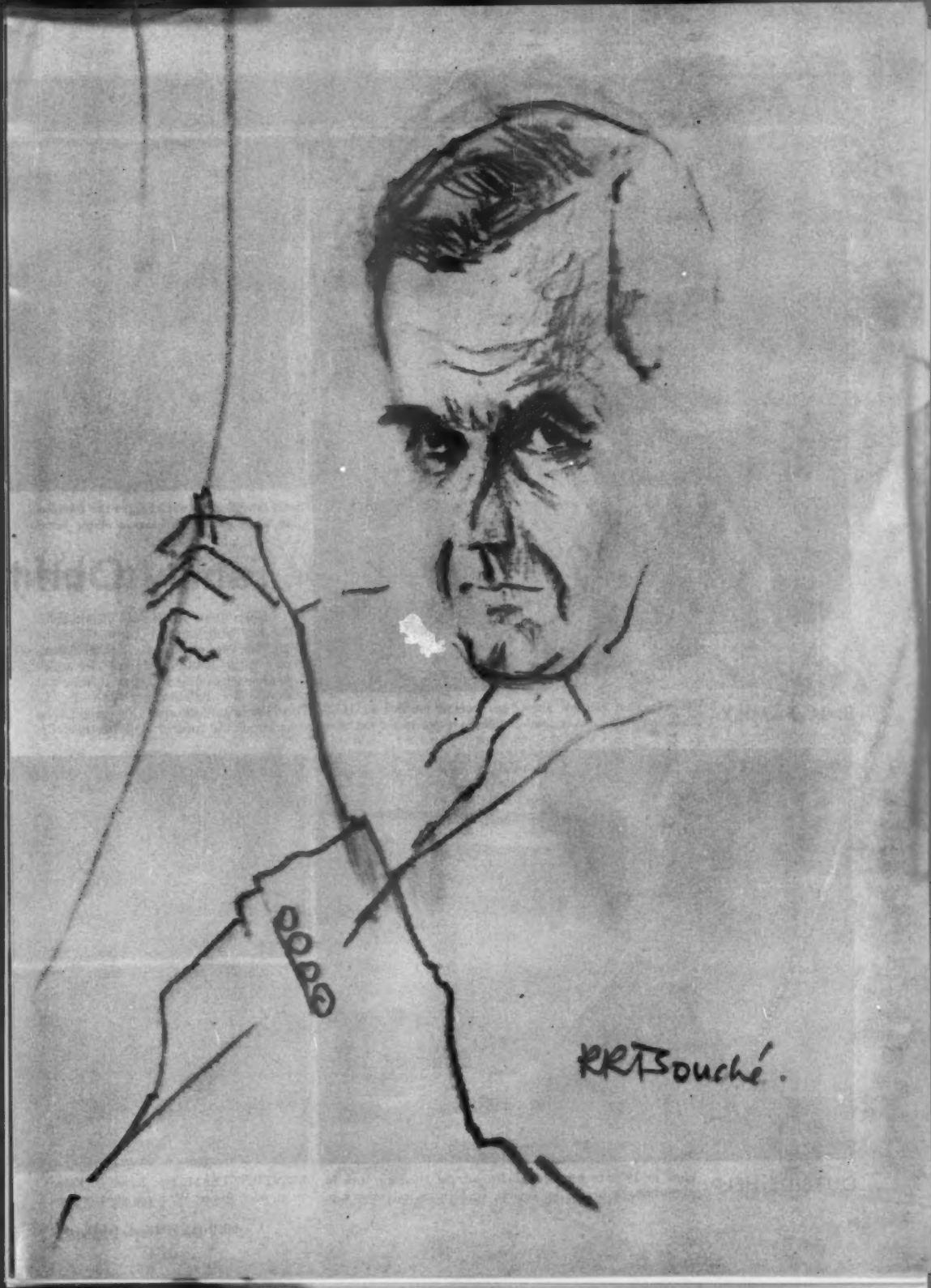
To Edward R. Murrow, and his co-producer, Fred W. Friendly, we add our own applause. And to the sponsor, Alcoa, our congratulations for enlisting an ambassador so welcome in American homes.

To other advertisers, we offer this important footnote: even a program so brilliantly conceived and edited as this, needs the production skill and polish CBS Television provides for all its wide range of programs.

Today CBS Television crackles with new program activity, shaping shows to provide the kind of television 1952 advertisers need.

The program that will most effectively represent you to your public is most likely to be found where "See It Now" was produced.

CBS TELEVISION



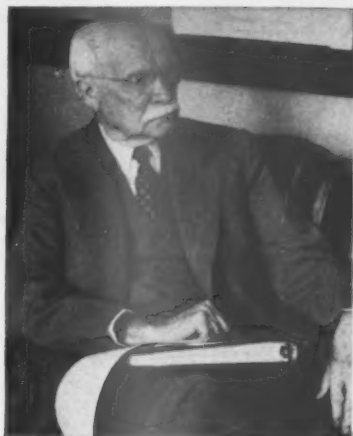
PRISOUCHÉ.

MANAGEMENT



BALL FAMILY

still owns and controls mason jar business founded in 1878. Edmund F. Ball (above), president, is son of one of the founders.



GEORGE A. BALL, last of the founders, is family patriarch, chairman of the board.

Family Outfit

When John L. Mason invented his famous fruit canning jar in 1858, he laid the groundwork for one of America's great family fortunes. It wasn't Mason's fortune, though. It was that of the five Ball brothers.

Twenty years after the original invention, the firm of Ball Brothers Co.



OUTSIDE HELP

hired in 1950 to help the family put the company back in competition is headed by Duncan C. Menzies, executive v.p.



MENZIES' TEAM: top, James L. Knipe (left), sales; Robert W. Biggs, glass; bottom,



JOHN W. FISHER, vice-president of metal and zinc closures, married Janice K. Ball.



ALEXANDER BRACKEN, vice-president and general counsel, married Rosemary Ball.

Adopts Management Team

was formed to make mason jars. Eventually it moved to its permanent home in Muncie, Ind., and soon developed into one of the world's biggest manufacturers of glass containers.

As the years went by, Ball Brothers began lagging behind more aggressive competition, like many another family

enterprise. By 1946 all but one of the founders was dead; the company too was aging fast.

• **Something New**—At that point, Edmund F. Ball, son of one of the founders, returned from the war. Ball—he's president now—took a long look at the company, and didn't like what he saw. Things began to happen.

Last week, Ed Ball was able to announce the windup of a long reorganization. A top operational team had been whipped together to put Ball Brothers back in the competitive race.

The final move was the election of James L. Knipe, a Union Bag & Paper Co. executive, as vice-president and general sales manager. Knipe is the fifth outsider to get a key post with Ball Brothers since 1950. The others are Duncan Menzies, executive vice-president; Robert W. Biggs, vice-president of glass manufacturing; Fred A. Schlossstein, vice-president and controller; and Ralph C. Edgar, vice-president for employee and public relations.

• **Committee**—These five make up the management committee—there's not a member of the family on it. The committee has a pretty free hand in coordinating the day-to-day operations of the company. On questions of major policy, it gets its broad instruction from the executive committee, where the Ball family's three-out-of-five majority assures control.

Of the company's 12 officers, though, only five are members of the family—



Ralph C. Edgar (left), employee relations; Fred A. Schlossstein, controller.

QUICKER THAN Tinker to Evers to Chance



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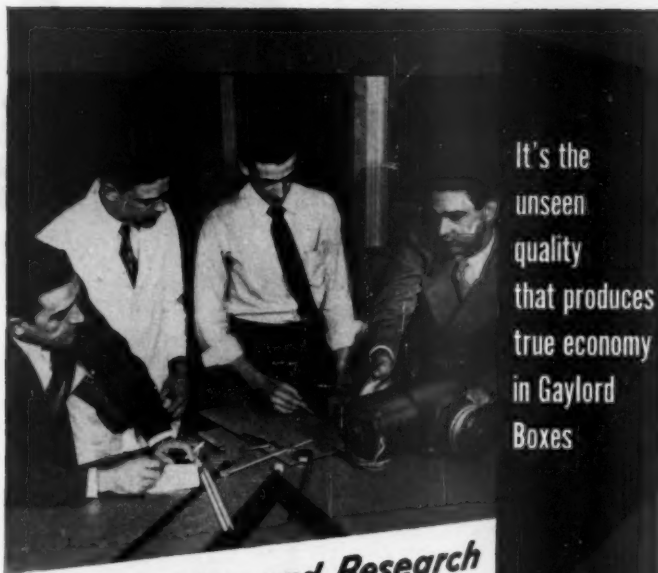
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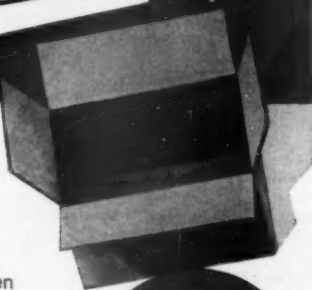


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and one of the five isn't active in management. Ed Ball is president. George A. Ball, last of the five founding brothers and now 90 years old, is chairman of the board. John W. Fisher and Alexander M. Bracken, both of whom married into the Ball family, are officers and members of the executive committee.

• **Family Rule**—Ultimate control and ownership still rests with the family. It has six of the eight directors, as well as executive committee control. But under the new setup the outsiders have the job of running the business.

The job that the outsiders are doing is the outgrowth of several years' planning by Ed Ball and the other owners. That planning in turn was a natural development from the company's past ever since it moved from Buffalo to Muncie near the turn of the century to be near cheap natural gas.

• **Diversifying**—As the company became a dominant factor in the mason jar business, it inevitably spread into other operations. There was zinc and steel for jar lids, rubber for jar rings, paper and paperboard for packaging, glass containers for commercial packers. Today, mason jars make up only 10% of the business; the rest is scattered around.

Glass containers of all types remain the biggest part of output. Rubber specialty products are sold to the automotive, aviation, and electrical appliance industries.

One example of how the spreading took place: Moving into zinc, for its lids, the company ended up by becoming the biggest maker of zinc cases for dry cell batteries.

• **Slow-Down**—Business in all fields was pretty good, but in the 1930s and early 1940s, Ball Brothers failed to grow along with its markets, or its competitors. Just about everybody admits now that the company was rapidly becoming ossified. Ed Ball, coming back in 1946, agreed. Specifically, he saw these flaws:

- The company lacked management in depth. Too few people were carrying too much of the load.

- It was a high-cost producer.

- The business was too seasonal. With orders depending on crop conditions and price pressure often severe, there was no balanced year-round flow of orders.

- Management controls over the big company were loose. Reports tended to be outdated and ineffective.

- **Refurbishing**—By mid-1950 the company was ready to make its first move toward renovation. Duncan Menzies was picked to shake it out of its slump. Most of the credit for subsequent improvement must go to this short, hard-driving enthusiast. Menzies came from Johnson & Johnson, a company noted

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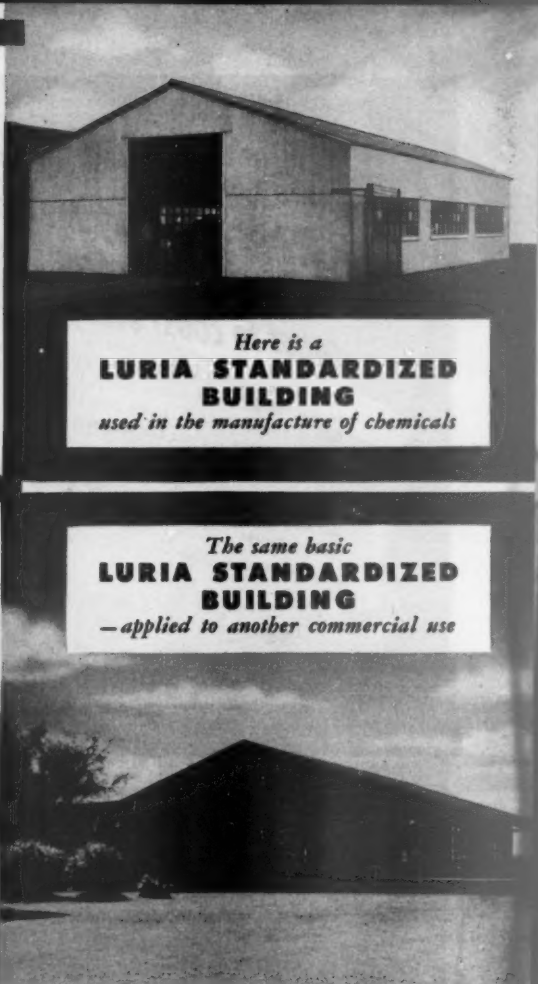
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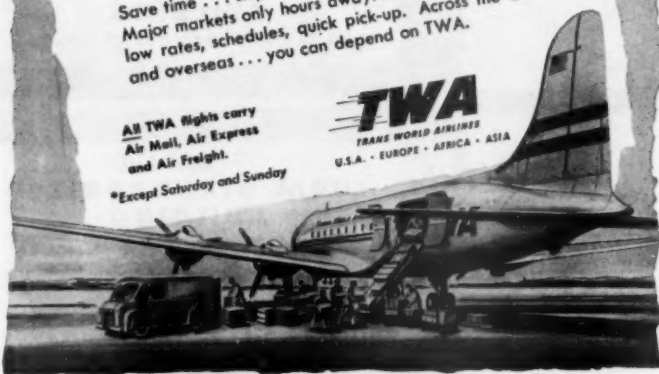
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**"... An executive earning
 \$25,000 a year wants three
 things..."**

MASON JARS starts on p. 58

for its modern management methods. There he had risen to assistant to the president, and a directorship.

At Ball Brothers, Menzies set out to overhaul the company. He (1) reorganized the top management setup, creating a batch of new jobs; (2) decentralized operations into major product divisions; and (3) went hunting for key executives who weren't bogged down in the traditions of the glass industry.

He split the company into six divisions: rubber, metal and zinc, paper products, and three geographic divisions for the manufacture and sale of glass.

Eight vice-presidents and six division heads report directly to Menzies, who in turn reports to the president. Eventually, Menzies plans to establish a vice-president of subsidiaries and divisions, to cut down the number of men on whom he has to keep an eye.

• **Big Year**—Menzies' moves began to bear fruit within a year. Last week Ball Brothers announced that it had completed one of its most successful years in the glass container field. Compared to 1950, sales of commercial glassware increased more than three times as fast as those of the industry as a whole. The company doesn't issue sales figures, but \$50-million a year would be a good guess at its gross.

• **Man Hunting**—Probably the toughest part of Menzies' reorganization job has been finding the right men to fill the jobs he created. Often it took six months, as many as 250 interviews, to find the right man. To show how choosy the company was: No one was picked until his wife had been brought to Muncie to see if the family would fit into small-city life.

Incentives were set up to insure that when the right man was found he could be had. Menzies figures that an executive earning more than \$25,000 a year wants three things: "A feeling of belonging in top control; a title, as a measure of success; and the chance to build an estate for his family."

Menzies filled the first demand by creating the management committee. Officers participate in all decisions, get an over-all picture of company operations.

Titles were no problem. There were plenty of these, since the Ball family wasn't interested in reserving them for itself.

Building an estate was more difficult. Here's what Menzies did:

• A deferred compensation plan was set up. Part of each executive's



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salary is tucked away to be returned—with interest—when he leaves the company or retires.

- Stock was set aside for management men who show unusual skill during the next two years. The amount of stock made available is not enough to shake the family's control of the company.

- A profit-sharing plan for executives has been promised.

- **New Faces**—Menziez went outside the glass industry for all his key men.

Robert W. Biggs, now in charge of glass manufacturing, had been operations manager for National Electric Products Co. In six months with Ball Brothers, he boosted productivity by 20%.

When Menziez arrived, he found management controls in bad shape ("We were using vegetable soup book-keeping—everything thrown into one pot.") He hired Fred Schlossstein from Price, Waterhouse & Co. to set up a control division. Now each department and division is on a profit-and-loss basis.

Ralph Edgar was picked up from Allegheny Ludlum Steel Corp. to tackle the big job of employee and community relations. Ball Brothers has 3,500 employees in Muncie—a sizable chunk out of the city's 60,000 population. There are several hundred workers in other cities.

- **New Fields**—The latest appointment—James L. Knipe as sales chief—ties in directly with Ball Brothers' plans to move into new marketing fields. He's an expert on paperboard and containers. At present, Ball Brothers owns a paper mill, but still fills a good part of its packaging needs from the open market.

Diversification promises to be the answer to seasonal fluctuations. The highly seasonal mason jars are now only a tenth of the business, but the containers sold to commercial canners suffer wide ups and downs of their own, depending on the size of fruit and vegetable crops.

To insure greater stability, Ball Brothers is already developing new markets in pharmaceuticals, beverages, cosmetics. A new market research department is hunting for still more outlets.

- **Bigger Plant**—The company is aiming at physical expansion, along with the broadening of its markets. As part of a four-year program, \$1-million has been allocated for rebuilding glass furnaces, another \$1-million for plant modernization and the purchase of new glassmaking equipment.

According to president Ball, this is only the beginning of a four-year program of face-lifting that will make the company's plant as up-to-date as its new management setup.

NOW-
...housewives can
see sugar quality
before they buy!

This Successful Package Creation of transparent cellophane clearly shows that Godchaux Sugar is extra fine, extra white, with no lumps or caking. The double wall, seamless bottom bag is sift-proof, dirt-proof, moisture-vapor-proof, and has a built-in pouring spout that's easy to open, easy to close. It features full-color illustrations of desserts, with their recipes, to help dealers tie in sugar with other food promotions . . . to give shoppers an additional "reason why to buy."

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STEREO-REALIST INTEREST CHART*

	Superior	Very Good	Fair
1. Initial interest expressed in viewers by customers - - - - -	50%	35%	14%
2. Amount of assistance offered by viewers in enabling you to open a sample case and make presentation of line - -	60%	33%	5%
3. Buyers' reactions upon viewing slides - -	40%	42%	14%
4. Buyers' sustained interest in going through all the slides - - - -	47%	41%	10%
5. 3-Dimensional Viewer's ability to help you increase amount of sales	38%	51%	6%
6. Your own impression of its long-lasting merits	74%	20%	5%

*Independent survey among salesmen using the REALIST System. Published in SALES MANAGEMENT, April 19, 1951.

BUYERS and salesmen alike vote overwhelmingly in favor of REALIST slides, which exactly portray products in true-to-life third dimension and full, natural color. Buyers actually welcome REALIST pictures, because they can study every detail of construction, color, texture without leaving their desks. Salesmen like them because they get the customer's undivided attention, save time, and eliminate bulky sample cases.

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MODEL OIL FIELD KITS get Standard Oil Co. of California's story across to students and teachers alike. It's all part of a campaign that shows . . .

How to Change Public Opinion

Back in 1948, polltakers found that the public didn't think so well of Standard of California as the company would have liked. So Standard launched a campaign.

California school children are learning the story of oil the easiest way possible—and Standard Oil Co. of California is reaping the goodwill of teachers and pupils alike.

Instead of listening to dry-as-dust lectures, pre-teenagers are building Lilliputian oil fields complete from exploration to production. Standard has supplied 1,000 kits—called the "model oil field project"—to schools in seven Western states, Hawaii, and Alaska. The kits come with Standard's Chevron and RPM trademarks. They can be colored, pasted onto tiny storage tanks.

• **Public Relations**—The kits are the latest idea of the company's education section to put the company in the best possible light. (One reason: The anti-trust suit facing Standard and six other West Coast oil companies.)

It all started back in 1948 when Standard hired public opinion experts to find out where it stood in the public's mind. Polltakers knocked on more than 3,000 doors getting answers to the basic question: What do you think of Standard Oil Co. of California?

What management found out gave it the basis for a broad-gauge public relations program aimed at answering questions on bigness, selfishness, profits, ownership, competition, oil and gasoline prices.

Most startling, say Standard officials,

was the attitude of school teachers. Only 38.6% of that group thought the company was "progressive and public-spirited." Unfavorable teachers' attitudes, the company figured, could easily be transmitted to students.

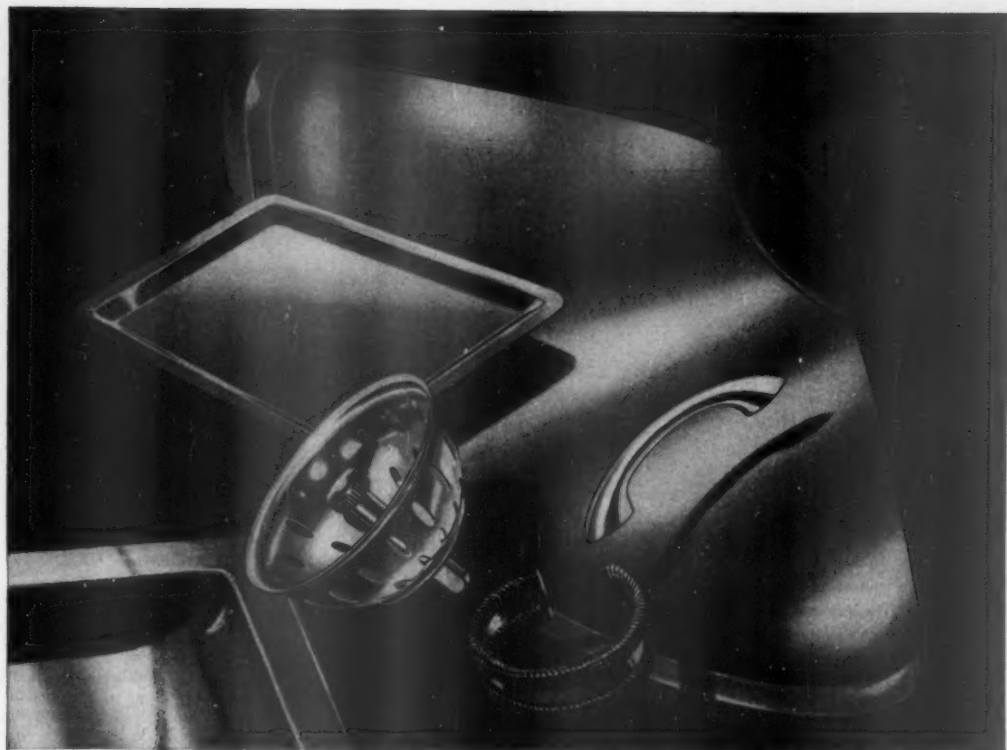
Now, after a year's campaign, the percentages on teacher attitudes have been reversed. Today, 56% think Standard is O.K.

• **The Campaign**—The model oil field kit is part of that school campaign. Allison McNay, supervisor of the education section, got the idea from a suggestion for a window display, decided to package the display for schools. Knocked down, the models are telescoped into cardboard tubes (the tubes make the storage tanks when cut in two).

On one apple box, children lay out the whole picture of oil discovery—from aerial mapping to underground seismicographic observations. On another, they draw a picture of an oil deposit, then construct drilling rig, pumps, tanks.

Right now, the cost per kit to Standard is \$1.85, not counting plans and instructions. Eventually, Standard may carry out the whole story of oil in models—go on with manufacturing, distribution, transportation, and research.

Besides the kits, Standard also provides music broadcasts for the schoolroom, educational films, and more than



Television picture cones, trays, hardware, jewelry — these are only a few of the products made today from Armco 17 Stainless Steel.

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If you are not permitted to use chromium-nickel stainless steels, you may find that a chromium grade of Armco Stainless will serve your needs.

Take Armco 17 (Type 430) Stainless Steel, for example. Today this non-nickel-bearing grade is used in place of 18-8 (Type 302) Stainless in products ranging from sink strainers to television picture cones. There are *no government restrictions* on end uses.

Armco 17 is one of the oldest standard types of stainless steels. It is ideal for many heat-resisting jobs up to about 1550° F., and has long been used for automotive trim and many commercial

and industrial applications. Today its list of uses is growing steadily.

Of course, the use of chromium-nickel stainless steels is still being approved by N.P.A. for defense-rated products and some industrial equipment.

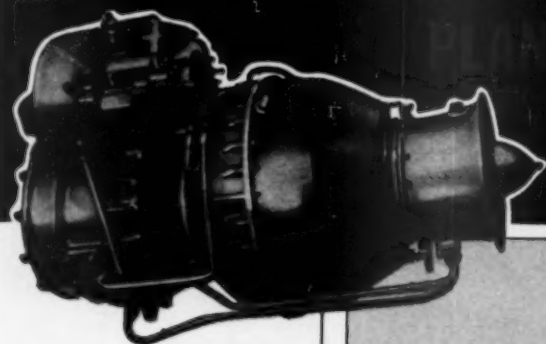
If your products are not on the approved list for the chromium-nickel grades, Armco 17 (Type 430) may answer your need for an alternate. We suggest that you talk it over with us, product by product. We can supply you with complete information on physical and mechanical properties, and recommended uses. Just get in touch with your nearest representative, or write us at the address listed below.

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The Continental-Turbomeca family of turbines includes units of four basic types. These engines have undergone exhaustive tests, and have much to offer, both for the aircraft industry and for various ground applications—military and commercial—where lightness and compactness are essential.

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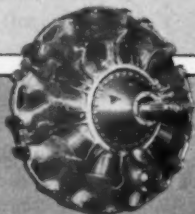
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A 325-h.p. version of the Continental B-975 radial air-cooled engine, with refinements adapting it especially for helicopter applications, is in production at C.A.E. for such craft as the Piasecki HUP-1 and HUP-2 and the Kaman HO4. Its ability to meet the exacting requirements of helicopter use makes it an important application in fixed-wing aircraft too.

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100 scholarships. Thirty-six are leadership scholarships of \$500 each, another 66 are 4-H and Future Farmer scholarships of \$250 to \$1,000 each.

• **Frontal Attack**—On top of the educational program, the company set out a year ago to overcome what it considered some of the general public's misconceptions about the oil business and Standard's part in it. The 1948 poll-takers found that 53% of their sampling thought Standard was too big; 31.9% thought it had only a little competition; 46% figured it made too much money; and 81% were sure oil companies got together to set prices.

A broadside of advertisements in 560 newspapers (with 8-million readers) answered questions like these:

"What have I got to lose if they break up Standard?"

"Why should Standard be in all parts of the oil business?"

"Honestly now—aren't gasoline prices too high?"

Radio programs tell human interest stories to get the company's chief message across: "Bigness isn't necessarily badness."

The campaign has paid off handsomely. In the 1951 poll, public opinion was more favorable on every question that Standard put in its survey. On some of the questions, Standard made only a few more friends than it had in 1948. On others, it made big gains. In 1948, for instance, only 19.7% in the survey said the company had a great deal of competition. That figure in 1951 was 47%, a gain of 138.5%.

MANAGEMENT BRIEFS

Top-job evaluation: More companies than ever before have formal job evaluation programs for management positions, according to the National Industrial Conference Board. Of 244 companies surveyed, 123 reported some sort of plan to rank upper-level jobs. In 1946, only about a third of the companies checked used such a plan.

• **Economic education:** Foremanship Foundation (Dayton, Ohio) gives management a chance to look at what industry is doing to educate employees in basic economics. It has published a survey, headed by Dillar E. Bird, former president of the Society for the Advancement of Management, of 15 economic education programs.

• **Donations guide:** Businessmen trying to decide where to donate company funds can get a lot of help from Giver's Guide, published by the National Information Bureau, 205 East 42nd St., New York City.



Now you can laminate with assembly-line speed

Looking for a faster way to laminate? Here's the answer: a new Armstrong's Adhesive that reduces laminating time to less than three minutes.

With this Armstrong's Adhesive, there's no need for jigs, clamps, presses, or curing stacks. Laminates feed through a coater directly into an infrared oven. Then they are assembled and run through rubber-covered pinch rolls. The finished laminate can be cut or shaped right away; you can ship it immediately.

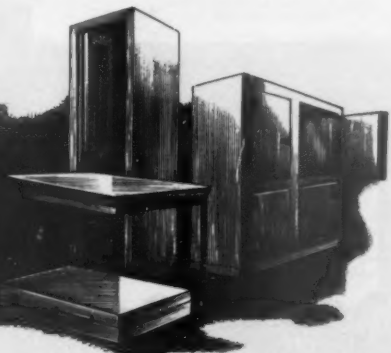
Today Armstrong's new adhesive is bonding steel to hardboard, high- and low-pressure laminates to backings, and many other varied combinations.

If you make or plan to make a laminated product of any kind, we'd like to hear from you. Perhaps we can speed your production or help get a new product into production.

Call or write Armstrong Cork Company, Industrial Adhesives Dept., 5202 Reservoir St., Lancaster, Pa.; in Canada, Armstrong Cork Canada, Ltd., 6935 Decarie Blvd., Montreal.

ARMSTRONG'S ADHESIVES

Made by the makers of Armstrong's Linoleum



There's an idea here for you!



How to "wrap-up" a 1200-lb. package!

Heavy, hard-to-handle rolls of plastic sheeting speed their way safely and economically to automotive safety glass manufacturers in strong, shock-absorbing, freight-saving H & D corrugated Pallet Paks. Previously, drums were used with a resulting high handling and shipping expense. Now—this simplified packaging method, developed by the H & D Package Laboratory, protects nine rolls in shipment. Over-all packing, handling, and storage costs are materially reduced.

Use H & D material handling methods to *your advantage*. You will realize freight savings, easier packing, simpler handling, better product protection, more economy at every step. For 13-volume "Little Packaging Library," write Hinde & Dauch, 5202 Decatur Street, Sandusky, Ohio.

H&D

HINDE & DAUCH
Authority on Packaging



C. L. AUSTIN, president of J&L Steel Corp., replaces Adm. B. Morell, chairman.

Bumper Crop of New Presidents Takes Over

There has been a rash of top management changes in the last few weeks—which isn't unusual at this time of year.

Two of the shifts involved leading companies of the steel and chemical industries:

C. L. Austin, formerly executive vice-president, was elected president of Jones & Laughlin Steel Corp. Admiral Ben Morell, chairman and president since 1947, remains as chairman.

Kenneth C. Towse took over as president of American Cyanamid Co. He moved up from the financial vice-presidency, replacing Raymond C. Gaugler, who died suddenly last month.

Here's a rundown on some other new presidents:

Fremont L. Lovett, Rockland Light & Power Co., replaces Rockwell C. Tenney, who became board chairman.

S. B. Irelan, Cities Service Oil Co., succeeds A. W. Ambrose, now chairman. (W. Alton Jones remains head of the parent company, Cities Service.)

James E. Robison takes the wheel for Textron Puerto Rico and Textron Mississippi, Inc. Royal Little, president of the parent Textron, Inc., resigned the presidency of the subsidiaries, but remains chairman of both companies.

Lester C. Higbee succeeds Charles E. Smart at W. & L. E. Gurley, Troy (N. Y.) instrument company. Smart moved up to chairman of the board.

Robert D. Devereux, youngest of the new presidents (29), heads Oneida Knitting Mills, Utica, N. Y., taking over from his uncle, F. Ramsay Devereux, now chairman.



"Time for everyone...how does he do it?"

HOW does he do it? How can he pack twelve hours work into an eight-hour day?

The answer is simply this. He has learned the secret of all successful executives. He has learned how to *organize time*—for in business today time is the critical factor.

Note how "time economy" enters into his choice of equipment. His desk, for example, has been specially "time-engineered" by Shaw-Walker to cut time-wasting details to a minimum, to leave his desk and his mind clear for action.

Only Shaw-Walker could design this "executive" desk. It was born of more than fifty years of serving the needs and saving the time of American business.

And there are other Shaw-Walker desks, chairs, Fire-Files, filing cabinets, loose-leaf and payroll equipment—everything for the office except machines—each "time-engineered" for the needs of every job and worker.

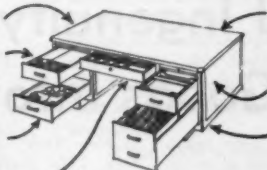
If you are setting up a new business or merely wish to modernize worn, out-dated offices, make sure you use Shaw-Walker equipment throughout. It will help you make the *most of every minute, every working day!*

New, low, comfortable height (29"). Puts you on top of every job.

Job-engineered drawer space—wired for telephone connection.

Concealed, removable wastebasket—saves time, floor space and litter.

Center drawer with extra compartments—space for everything you need at your finger tips.



Most comfortable working top ever invented.

"In," "Out," and "Hold" letter trays *inside*—confidential, quick, no desk-top clutter.

Scientific personal file with speed guide, dividers—saves "barrels" of time.

Write for FREE BOOKLET

The booklet, "Time and Office Work," is packed with ideas for stretching office time. Organize now for greater sales effort and lower operating cost! A wealth of information on "time-engineered" office systems and equipment. 36 pages! Many color illustrations! Just off the press! Write today, on business letterhead to: Shaw-Walker, Muskegon 6, Michigan.



SHAW-WALKER

Largest Exclusive Makers of Office Furniture and Filing Equipment in the World

Executive Offices at Muskegon, Michigan
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INDUSTRY



SURPLUS TRADERS gave their ingenuity a workout in New York last week, at the Institute of Surplus Dealers' first trade show.

Luck and Ingenuity Turn Surplus Goods Into Profits

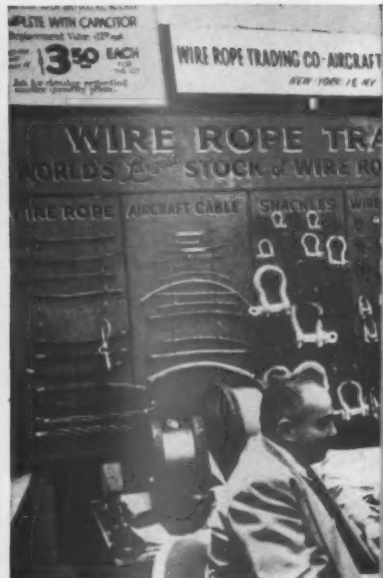
At one time or another every industrial plant has odds and ends of equipment lying around that it can't use. To the uninitiated, this surplus material might look like so much junk. But the surplus dealer's business is to turn such "junk" into big profits—and he makes a valuable contribution to the nation's economy as well.

Last week surplus traders from all over the country unleashed their ingenuities, at the Institute of Surplus Dealers' first trade show and convention

in New York. For three days more than 5,000 buyers and sellers pored over exhibits of everything from coonskin caps to wire cable, exploring every possibility for resale.

• **Sellers' Market**—All during the show the accent was on buying. That's because much of the surplus contains steel or other scarce metals; dealers have no trouble selling it if they can just lay hands on it.

For this reason today's surplus traders, particularly those who deal in in-



BUYING was the keynote. Gene Connolly (center), of Wire Rope Trading Co. and member of the board of



EVERYTHING from wire rope to gas masks was explored.



governors, says the reason for this is simply that: "One of the shortest things today is the shortage of surplus."



The imaginative dealer can often turn what seems a white elephant into a salable item.

BUSINESS WEEK • Feb. 9, 1952

PUSH VOLUME UP...

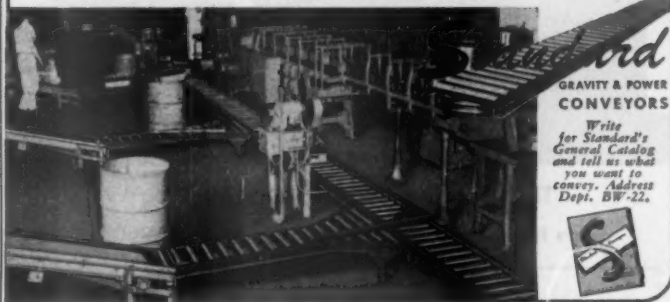
... PUSH COSTS DOWN

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Material handling often constitutes as much as 50% of total production cost — cut handling costs and you cut production cost.

More than 45 years' experience qualifies Standard to be of expert service on any "package" conveyor need — roller, belt, slat, chain, push-bar, sectional, portable self-contained conveyor units — spiral chutes — pneumatic tube systems. Write Dept. BW-22.

STANDARD CONVEYOR COMPANY
General Offices: North St. Paul, Minnesota
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GRAVITY & POWER CONVEYORS

Write for Standard's General Catalog and tell us what you want to convey. Address Dept. BW-22.



Ask Bulkley-Dunton

how to RECLAIM INDUSTRIAL WASTES SOLVE POLLUTION PROBLEMS CONSERVE PROCESS WATER



Bulkley-Dunton's highly specialized Waste Recovery Engineers have helped save millions of dollars for American industry. By conserving process water, they have helped plants to continue operation — otherwise threatened to shut down due to water shortage. They have solved water pollution problems, saving plants from costly litigation and harassment.

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Pacific Coast: Security Bldg., Pasadena 1, Cal.



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The compact OZAMATIC machine uses the famous high-speed, low-cost Oxalid process—60 times faster than old-fashioned copying! It gives you accurate copies of anything written, printed or drawn on translucent materials.

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No Stencils...
No Make-Ready...
No Plates...
No Negatives...
No Messy Inks... No Darkroom!



2 Clean, Dry Copies Instantly

No Proofreading... No Poor Carbons...
No Smudge or Distortion... No Waiting!



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OZALID

You'll find all the basic advantages of Oxalid's versatile, low-cost copying process built into OZAMATIC's compact desk-top cabinet.

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You need no special operator for OZAMATIC. Anyone can learn to operate this machine in 5 minutes... can deliver your first copy in seconds, or 1,000 letter-size copies per hour, at a cost of less than 1½¢ each.

For full details on the amazing economies possible with OZAMATIC, use the coupon—today.

OZALID, Dept. A-24
General Aniline and Film Corp.
Johnson City, N. Y.

Gentlemen: Please send me complete information about your OZAMATIC machine.

Name

Company

Position

City State

Or call the OZALID distributor listed in your local classified telephone directory.

"... today's surplus traders are becoming just as important to our economy as the scrap dealers..."

SURPLUS DEALERS starts on p. 72

dustrial items, are becoming just as important to our economy as scrap dealers. They move essential materials from dead spots to defense and other companies that need it.

• **An Old Breed**—The surplus dealer is no new breed of businessman. There was money to be made in surplus trading long before the defense economy, even before World War II, came into being. But the large amounts of surplus available after the war boosted the industry to heights never dreamed of by the early traders.

By now most of the war surplus has petered out. But there's enough industrial surplus floating around to make it a lucrative business, one that runs into millions of dollars a year.

• **Takes Some Doing**—The surplus dealer makes his money today buying equipment from one manufacturer and selling it to another. But sometimes it takes a lot of imagination to convert surplus from the form in which it is into a form that will sell.

Here's how a little ingenuity brought one dealer a handsome profit. A manufacturer had, scattered around his plant, 400 tons of wire rope cable in odd lot sizes that he had no further use for. A surplus dealer bought it all for \$40,000. He found he couldn't sell the cable in one fell swoop; so he sorted it out into three lots according to size. A few weeks later he sold one lot alone for \$40,000; the other two lots were gravy.

• **Farsighted**—A trader has to be something of a crystal-gazer, too, in order to recognize a good prospect when he sees one. Take the case of a tubular steel furniture maker who had some lengths of steel left over that were too short for his line of furniture. A surplus dealer bought up the metal, then quickly sold it to another furniture manufacturer who happened to need that size of steel just then.

• **Risky Business**—The surplus trader doesn't always come out ahead, by any means. He's in a highly speculative business, and there are no rules to guide him. He has to be able to risk frequent losses. And he has to have the cash ready when he comes on something that looks good.

The typical dealer does most of his trading by telephone or through trade journal ads; many don't even have retail stores. But one way or another he is always on the lookout for materials that are lying idle or can't be used. Sometimes he's lucky enough to find a com-

Johnson City, N. Y. • A Div. of General Aniline & Film Corp. "From Research to Reality"

Ozalid in Canada—Hughes Owens Co. Ltd., Montreal

American Blower — a time-honored name in air handling



The hottest, dampest summer day won't bother you a bit once you've installed an American Blower Air Washer in your business.

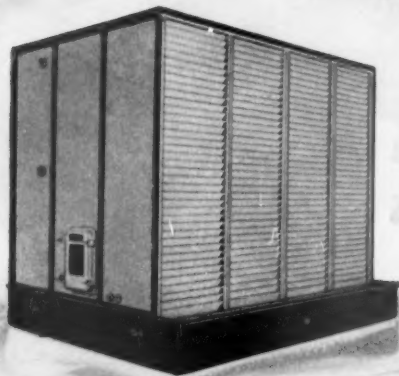
These precision-built units cleanse and wash inside air at remarkably low cost.

Three standard classes are available: the Class 8 Air Washer and Dehumidifier, a heavy duty unit with 2 spray banks; the Class 6 Air Washer, an intermediate capacity unit with a single spray bank; the Class 4 Air Washer, a compact, economical, single-spray-bank unit designed for minimum space.

For details, ask the nearest American Blower Branch Office.

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CANADIAN SIROCCO COMPANY, LTD., WINDSOR, ONTARIO

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American Blower Air Washers and Dehumidifiers are available in three standard classes and in a wide range of standard sizes. Capacities from 5,550 to 117,350 cfm.

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For a long time it's been known that certain foods taste better, keep better in a can that's coated inside with enamel. But it used to take this enamel a long time to dry. That made the cans more expensive than they should be.

So Continental research people went to work to find can linings that would dry and cure quickly. After extensive study, they developed several such linings. Applied to sheets of can metal, the new enamels dried six times faster than those first used, and three times faster than many used more recently. Now we can have sheets ready to be made into cans after only eight to ten minutes in the bake oven.

But our scientists are keeping right on working. Their new goal is enamels that will dry in one or two minutes and make lined cans even more economical.

Here's another example of what Continental is doing to provide better protection for packaged products—at lower cost. No matter how satisfactory the present performance of our cans, paper containers and fibre drums, our aim is to make the best even better.

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CONTINENTAL CAN BUILDING



CAN COMPANY

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TIN CANS



FIBRE DRUMS



PAPER CONTAINERS



STEEL PAILS AND DRUMS



CAPS AND CORK



PLASTIC PRODUCTS



DECORWARE

Nature
forgot
just one
thing



but let's make sure the man-made products we sell are easy to get at with quick-opening Dobeckmun Zip-Tape. The saleability of tight, film-covered packages is instantly stepped-up by the added convenience of Zip-Tape... and in any color the cost is so low as to be almost negligible. Most all packaged products benefit from Zip-Tape accessibility. Phone your Dobeckmun man today. The **Dobeckmun** Company, Cleveland 1, Ohio • Berkeley 2, California • Bennington, Vermont

"... He has to be able to risk frequent losses ..."

SURPLUS DEALERS starts on p. 72

pany that's switching to defense work, and can buy up its inventory. Again, he may buy up the equipment of a bankrupt company. He'll turn his hand to anything where there's a prospect of making a profit.

• **From Nuts to Towns**—A good example is Quincy-Grossman Surplus Co., in Quincy, Mass., one of the largest dealers in New England. Its warehouses, which cover 300,000 sq. ft. of space on a 75-acre lot, are loaded with everything from generators to nuts and bolts. Now Quincy-Grossman has undertaken what may well be the biggest, and the riskiest, venture in its 80-year history—purchase of an entire town, Passamaquoddy, near Eastport, Me.

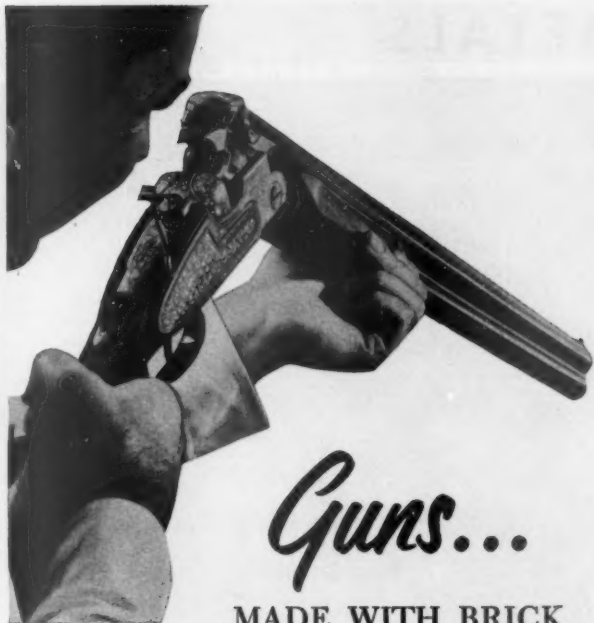
The federal government built Passamaquoddy in 1936 as the site for a proposed power project. The project was abandoned, and the town was turned over to the War Assets Administration for disposal. Quincy-Grossman bought it in 1949, at a fraction of the \$3.5-million the government spent settling it and building equipment.

Quincy-Grossman has Passamaquoddy well on the way to becoming a full-fledged industrial community. It has built and sold or leased several plants, including a fish-freezing plant, sawmill, and machine shop. Seventy-five families have moved into the 110 houses that stand ready and waiting; some are setting up businesses of their own. Quincy-Grossman stands to make a tidy profit from sale and lease of these buildings and houses when, and if, the town gets on its feet.

• **White Elephants?**—It's easy to see that the range of items a surplus trader can turn into profits is limited only by his imagination. Buck's War Surplus, of Ogden, Utah, for instance, might be called a house of white elephants. Not long ago Buck bought 200,000 outdated gas masks—the whole lot for \$26. Obviously, he couldn't sell them as gas masks. So he detached the rubber hose from the cannister on each mask, put an extension on the hose pushing the end through a hole in a piece of wood, and presto: a makeshift diving-helmet for children. Buck sells the helmet for \$2; he has to sell just 13 to cover the cost of the 200,000 gas masks.

• **Typed**—Some surplus traders, though, have become specialists in a particular field, handle only one kind of product.

Wire Rope Trading Co., for instance, started a \$1,000 business in 1940 buying surplus cable from the Air Force. Today it's a million-dollar business, claims it has the largest stock of wire rope in the country.



Guns...

MADE WITH BRICK

To the sportsman who cherishes this handsome Beretta "over-and-under," it may come as a shock that it was made with brick! Refractory brick... to line the furnaces that produced the fine steel for the barrels, the beautifully etched lock—even the tools for the checking on the rich walnut stock.

Refractory brick such as General Refractories' RITEX and STEELKLAD basic brick for open hearth and electric arc furnaces, where high temperatures and chemical action require a truly superior product.

From research laboratories, mines, and manufacturing plants from coast to coast and overseas, Grefco refractories are being produced in ever increasing supply. Fireclay brick, silica, mortars, plastics, castables and bulk products for the metals, paper, chemical, glass and power industries.

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STEELKLAD—a basic magnesite-chrome brick, permanently jacketed in a patented steel shell. Just one of thousands of superior Grefco products.

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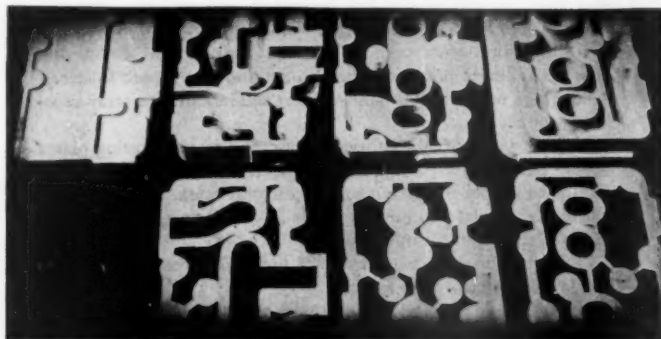
METALS



IN BUILDINGS Alcoa's 30-story headquarters in Pittsburgh's Golden Triangle is a showcase of aluminum's uses. Exterior is aluminum and . . .



. . . grids of aluminum tubing are hung under the ceilings, then buried in plaster . . .



IN ENGINES Four sectional slices of an aluminum cylinder head (top row) and three stamped aluminum brazing gaskets are ready to be . . .



. . . assembled, as in this slightly exploded view, for the furnace brazing that . . .

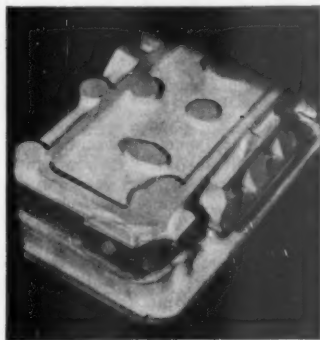
Alcoa Is Rarin' to Go After Civilian Markets

When U.S. aluminum expansion is rounded out next year, capacity will be twice as much as in 1950. From pre-Korea capacity of 1.45-billion lb., it will have risen to 2.9-billion lb. That's also more than twice as much as the industry ever sold in a year without the stimulus of a big arms buildup.

You'd think the industry would be worried about expanding too far for a



... to carry hot water for downward radiant heating. They also serve to deaden sound.



... forms the finished cylinder head, complete with fuel and water passages.

peacetime economy. And some people are hanging craps. Besides our own expansion, they see a danger in Canada's growth to 1.25-billion-lb. capacity—especially when most of Canada's ingot production is less expensive than ours.

• **No Threat**—However, no one seems happier over the United States expansion than I. W. Wilson (cover), presi-

BUSINESS WEEK • Feb. 9, 1952

One Spark—

makes the difference



• To assure complete freedom from the danger of electrically caused explosions, wire and light the hazardous locations in your plant with Appleton Explosion-Proof Equipment.

These scientifically designed fittings and fixtures safely seal off the dangerous arcs that can spell disaster in the electrical circuits of oil refineries, chemical plants, hospital surgeries—any area where flammable dust, vapors or gases may be present.

Don't wait for a fire to force the issue. Write for further information today.

Type FSQX Explosion-Proof and Dust-Tight Plug and Receptacle with interlocking safety switch.



The Appleton Seal-Line Switch Unit is a combination switch housing and sealing unit. Completely explosion-proof without additional sealing fittings. Pat. No. 2,208,558

APPLETON Explosion-Proof Equipment



Safety and service features of the Appleton Type EPU Explosion-Proof Fluorescent Lighting Fixtures make them foremost in design of fluorescent lighting for hazardous locations. Pat. No. 2,392,202



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Engineered

TO STAY ON THE JOB!

An overhead traveling crane must be built for lifetime service. Anything less isn't good enough. 500-lb. to 300-ton size or larger, "Shaw-Box" Cranes are engineered to do a job and stay on the job. That is why thousands of these rugged cranes are on duty in hundreds of industries.

Every "Shaw-Box" Crane manufactured today is a product of more than 60 years of pioneering research devoted exclusively to the improvement of load-handling equipment. All types and capacities are safety-engineered and constructed to provide complete protection for man, load and crane. Enduring stamina assures absolute reliability and long life under the most unfavorable conditions of service.

If your defense production requires modernized, enlarged or entirely new facilities, invest in the crane you can trust — a "Shaw-Box" Crane. Our engineers will gladly recommend the best equipment for peak efficiency and economical operation over the years.

Write for Catalog No. 217 showing "Shaw-Box" Full Electric Traveling Cranes from 5 tons capacity up; Catalog No. 218 for 'Load Lifter' Cranes from 1 to 25 tons.



SHAW-BOX CRANES



MANNING, MAXWELL & MOORE, INC. Muskegon, Michigan

Builders of "Shaw-Box" Cranes, 'Budgit' and 'Load Lifter' Hoists and other lifting specialties. Makers of 'Ashcroft' Gauges, 'Hancock' Valves 'Consolidated' Safety and Relief Valves, 'American' Industrial and 'Microsen' Electrical Instruments.

"... Aluminum costs 5% less than in 1939; some metals cost 250% more ..."

ALUMINUM starts on p. 80

dent of the Aluminum Co. of America.

"I can see no threat to the aluminum industry in the capacity additions as planned," says Wilson. "In fact, in a free market with a normally good world economy, we're more likely to need new capacity than we are to find ourselves with excess plant."

When he says this, he isn't just whistling in the dark. Alcoa marketing experts conservatively estimate that the company will get 270-million lb. of new or expanded business whenever the free market arrives. They're conservative in that they count on only 30% of the industry's potential extra business, while Alcoa will have 40% of the industry's capacity.

Alcoa's expansion is carrying it to 1.16-billion-lb. capacity. If the company did only as much business as in 1950—that's 1-billion lb., including the foreign metal and scrap it bought to fill orders—it would then have an excess of 160-million-lb. capacity. But if it had its estimated gain of 270-million-lb. sales over 1950, it would have a capacity deficit of 110-million lb. Just as Wilson says.

• **A Changed Industry**—Whenever the free market comes, it will find a vastly changed industry.

For one thing, the capacity will be distributed differently from before Korea. Alcoa's share will have dropped from 50.8% to 40% of the total, and Reynolds' share from 31% to 28%. On the other hand, Kaiser's share will have risen from 18.2% to 27%, and Anaconda, a newcomer, will have 5%.

The other, more significant change will be in the market. With a margin of production capacity over pre-Korea demand, the aluminum companies are going to be forced to do a new kind of selling job—something they haven't faced for more than a few months at a time since 1939 or earlier. That shouldn't be too much of a problem. Trends are working in their favor:

• Aluminum today costs 5% less than in 1939, while competitive metals cost from 78% to 250% more.

• Capacity has grown big enough to attract some potential heavy users who couldn't afford to depend on an unreliable source.

• Continued shortage of a main competitor—copper—has pushed large-volume consumers toward aluminum.

• Technological problems of using aluminum have largely been solved since 1939. Resistance to adopting aluminum now comes more from

BUSINESS IN MOTION

To our Colleagues in American Business ...

American business lays great emphasis upon salesmanship, and correctly so, because orders keep a company busy, provide employment, meet the payroll, pay for materials, amortize machines and buy new ones, and, if management is skilled, provide profits. Yet there are times when it is best to turn down an order. If, for example, a would-be buyer really doesn't need what he asks for, it is good business to tell him so, and show him a better way to satisfy his need. Revere has done this many times. In a recent instance, we were able to save a prospective customer some \$30,000. This was done while working with a public utility, an important user of condenser tubes. Examination of leaking tubes from one of its condensers showed that the trouble was due to a combination of erosion and corrosion at the inlet ends; the tubes were in good condition otherwise.

The condenser contains some 4,100 tubes, and to replace them would cost about \$35,000, surely a high price to pay for damage to a few inches at one end of each tube. Revere, instead of taking the order for 4,100 tubes, recommended use of a device to cure the trouble. There are several different makes of such devices, intended to be inserted in the leaky ends, thus effecting a repair. When conditions are suitable, several more years of service may be obtained from the original tubes. In the case under consideration, the cost of the repair was only \$5,000.

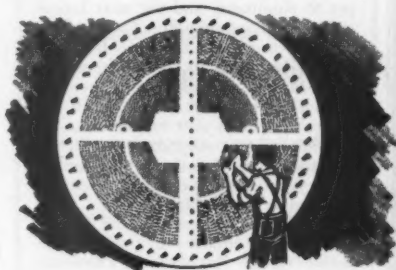
So successful has this recommendation proved for the utility that it has been followed for a sec-

ond condenser. This has about 2,700 tubes, and a corresponding saving has been realized. Of course, one might say that if the condensers had been properly designed in the first place, erosion-corrosion at the inlet ends would not have occurred. This is true, but the fact is that many utilities and other companies operating steam condensers have found it necessary to put burdens on them in excess of those for which they were originally designed. This necessitates increasing the velocity of cooling water, which in turn makes erosion more likely. Also, water conditions often change over a period of years, so that more corrosive conditions may build up, particularly in the industrial areas where so many condensers are located.

In showing this customer how to avoid buying a lot of condenser tubes, Revere was motivated by two principles. One was, and is, that fast friends and loyal customers are won by taking to heart the best interests of those

with whom we deal. The other is the patriotic motive of making the vital copper alloys serve as long and go as far as possible.

Many other materials besides Revere's Copper and Copper Alloys and Aluminum Alloys are vital to defense in one way or another. We urge everyone to conserve such materials as much as possible. Consult your suppliers. Like Revere they are not in business just for today or tomorrow, but, we all hope, forever. They will know what can be done to lengthen the service to be expected. This is not only patriotic, but it is also good business for them and for you.

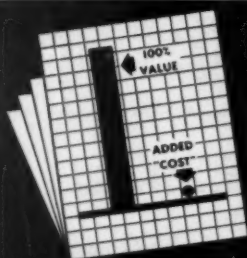


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Founded by Paul Revere in 1801

Executive Offices: 230 Park Avenue, New York 17, N. Y.

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Although their superiorities have been time-tested and proved beyond question, L. L. BROWN papers add negligibly, if at all, to total accounting and correspondence costs. Paper is but a minute part of such expenses. The difference in cost between the best and the rest is hardly appreciable.

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L. L. BROWN
RECORD
and
LETTER
PAPERS



"... All guesses could look over-cautious if sales and technical problems are licked..."

ALUMINUM starts on p. 80

thoughts of retooling and retraining than from problems of technique.

• **Big Potential**—With these factors in mind, the Alcoa market forecasters are making a product-by-product survey of the field. They haven't finished, but they've penciled in the potential figures for 15 major categories. That's how they got their 270-million-lb. estimate of demand that Alcoa would fill in a free market.

The biggest single market is the electrical industry. It is expected to soak up something like 475-million lb. of aluminum in a free market. Alcoa counts on supplying 200-million lb. of this need. That's a 90-million-lb. increase from Alcoa's sales for electrical use in 1950. But it's not out of line with the trends and possibilities.

For example, high-voltage transmission lines long ago switched from copper to aluminum, and the next logical step is to adopt aluminum for bare secondary power lines—the wires from the high-voltage lines to the neighborhood transformers. Alcoa estimates there's a 50-million-lb. market there. And if the power companies shift to aluminum for weather-resistant secondary conductors and for service lines from transformers to the houses, there could be a demand for another 125-million lb.

• **Other Major Users**—Not far behind the electrical industry in potential demand comes the building business. Alcoa foresees a market of 400-million lb., half of which should be sold by Alcoa. That would be a 40-million-lb. gain over 1950 for the company.

The auto industry is booked for at least 205-million lb. in a free-market year, with Alcoa gaining about 11-million lb. over its 1950 sales of 31-million lb.

Other segments of transportation offer a potential market of 160-million lb. In 1950 Alcoa sold about 50-million lb. to this market; it figures on increasing this to 73-million lb.

Another gain is in the refrigeration and air-conditioning fields, where use of aluminum should bounce up to 100-million lb. Alcoa sold about 45-million lb. to this market in 1950, expects to sell 60-million lb. in a "normal" free-market year.

Other categories among the 15 that Alcoa has surveyed thus far also show large percentage increases, though smaller volume.

• **Could Surprise**—All these guesses could look unduly cautious if aluminum

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salesmen succeed in breaking down the doors of some skeptical prospects—and if the machine-shop boys lick a few problems of technique.

Aluminum admittedly can be difficult to join together. Today, though, it can be welded successfully by several methods, and Alcoa has developed brazing procedures and fluxes it feels are very good. One remaining snag is the soldered joint where a tight seal, not great strength, is desired. You can solder aluminum if you can keep it dry, but if the joint is moist it'll corrode sooner or later. Alcoa people concede they don't have all the answers yet. They're working on the problems right now, with help particularly from the auto and electrical industries. General Electric recently adopted aluminum for lamp bulb bases.

• **Engines by the Slice**—Auto makers are testing a furnace-brazed aluminum engine. Aluminum costs about 2½ times as much as cast iron, by volume. But there are other factors besides price.

Iron engine blocks and cylinder heads are intricate one-piece sand castings that need a lot of costly machining. Aluminum engines can be cast in "slices" (horizontal cross-sections) by the less expensive permanent-mold process—four slices for a block, four for a cylinder head (pictures, pages 80, 81). This technique provides the internal passages for water and fuel without the expensive coring, core removal, and final machining of these passages that sand casting requires.

Besides, aluminum engines run cooler than iron ones. Knocking caused by pre-ignition (BW—Jan. 26 '52, p. 62) is less of a problem. A cooler-running engine permits higher compression, can do with a less expensive radiator.

If car makers buy the idea of the aluminum engine, Alcoa and the other producers could count on selling maybe 45 lb. of every V-8 cylinder head, maybe 70 lb. of each V-8 block. Alcoa people don't expect this to happen overnight, but every year the economic balance tips more toward the brazed aluminum engine.

• **Safe Guess**—Alcoa's forecasters don't count on any widespread adoption of aluminum by the auto industry to make up their 270-million-lb. gain after decontrol. They figure it might take five years or more to sell the auto people on buying as much aluminum as Alcoa thinks cars could profitably use—maybe 200 lb. per car. Detroit now uses about 15 lb. per car for about 75% of its output. Alcoa's market prediction figures on only about an additional 4.4 lb. per car in a 5-million-car year.

Furthermore, Alcoa feels confident even if business as a whole doesn't re-enter the free market at 1950's pace. Much of the 270-million-lb. potential



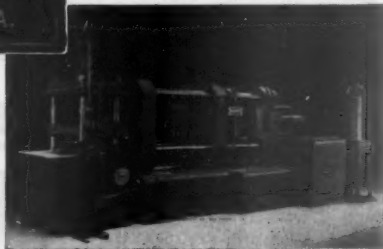
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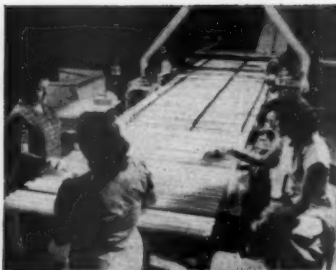


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NEWS FROM WESTINGHOUSE, THE FASTEST-GROWING LAMP MANUFACTURER

by Sam Hibben



DID YOU KNOW?

Many deep sea fish have built-in fluorescent lights, but one of them has a twist: The sub-order Ceratioidea has its fluorescent lamp on the end of a pole! Smaller fish go after this luminous bait, and wham—they get eaten. The trick, I suppose, is how to keep big fish from going after the bait—but big ones seldom go that deep, and many lighted-up fish can dim out at will.



Fish, incidentally, have—like onions, cabbage or dozens of other foods—wholesome but penetrating odors when cooked. Westinghouse has just introduced a tiny lamp that destroys odors—it really does. The lamp puts out rays that create ozone, and the ozone oxidizes the floating molecules of most common odors. It's easier to operate than explain, but it costs only about 5¢ a week to burn and it keeps air fresh and sweet.

A THOUGHT FOR THE DAY:

Your eye lenses act much like a camera's. This means that the image on your retina is upside down. That is, the top of a tree registers on the bottom of the eyeball. You've simply learned to interpret it around again after the electric impulses have carried the "television" picture to the brain. Had you known you were that smart, or does the world still look upside down?

More next month.

Sam Hibben

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"... Alcoa's president is
worried only about when the
free market will return..."

ALUMINUM starts on p. 80

will be there even at lower business levels. In fact, Alcoa thinks manufacturers can't afford not to use aluminum if they're doing any business at all.

• Price—Here is where aluminum's price trend goes to work putting a floor under use of the metal. You have to look at aluminum price in comparison with its competitors.

In 1939, when the industry had only 11% of the capacity planned for 1953, aluminum was selling at 20¢ a lb. On a pound-for-pound basis, it cost 80% more than copper, 7½ times as much as steel, four times as much as lead and zinc. But on a volume basis, 1 lb. of aluminum replaces a little more than 3 lb. of brass or copper (only 2 lb. of copper where electrical conductivity is the limiting factor), almost 3 lb. of steel, 2½ lb. of zinc, 4 lb. of lead.

On a volume-price basis, then, in 1939 aluminum was much more expensive than steel or zinc, competitive with lead and electrical copper, cheaper than copper for nonconductive uses.

Today aluminum costs 5% less—19¢ a lb. Competitive metals cost up to 250% more. And this is the present volume-price relationship: Aluminum is still one-third more expensive than steel, but it's about one-quarter as expensive as copper for nonelectric use, one-third as expensive as copper for electrical use, one-quarter as expensive as lead, about two-fifths as expensive as zinc.

• Competitive Edge—Over the long haul, Alcoa still looks on copper as the big rival. In this competition, aluminum has had a lot of help from the government: Defense Production Administration has harangued manufacturers for months to substitute aluminum for copper.

DPA's warnings of a perpetual copper shortage aroused angry protest from the copper people, and even Alcoa men agree that things aren't so bad for copper as DPA contends. Alcoa executives can't foresee the day when copper won't be a vigorous competitor. But they think the long-range picture will persuade more and more manufacturers to change metals, even in the face of heavy tooling, training, and redesigning costs.

Aluminum has many advantages, Alcoa points out. It's light, easier to handle, creates less dead load in the product. Its natural finish is unrivaled by any metal except stainless steel, and stainless isn't even close on price. Its corrosion resistance is good, and in electrical and thermal conductivity alumi-

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num is exceeded only by copper and silver.

• **Rival Producers**—Besides competition from other metals, Alcoa must deal with rivalry of other producers. Some people suspect that the company's stiffest competition in reaching its free-market goals won't come from Reynolds and Kaiser, the other big U.S. producers, but from abroad—especially Canada.

Canadian companies can turn out ingots at lower cost. That's mainly because of their access to more economical hydroelectric sites, though this may not apply to the 220-million-lb. expansion now under way in British Columbia.

Alcoa isn't too worried about the Canadians. They suspect Canada may find world prices more attractive than U.S. prices, for one thing. And Canada, while long on cheap ingot, is pretty short on finishing capacity, which Alcoa can offer impressively.

Besides, there's nothing sacred about today's 1½¢-a-lb. U.S. tariff. If competition from foreign producers gets stiff, the tariff might raise a protective arm. It was 2¢ a lb. as recently as last June, and through 1947 it was 3¢ a lb.

• **Doesn't Scare Easily**—President Wilson of Alcoa isn't greatly concerned about Canadian competition or, for that matter, by anything except how soon the free market will return. He has been around the aluminum business too long to get jittery.

Wilson joined Alcoa in 1911, fresh out of M.I.T. In nine years, with time out for World War I, he rose to the post of assistant to the vice-president in charge of reduction plants. In other 10 years, at the age of 40, he was a vice-president. That was better than par for the course in a company whose first employee, Arthur V. Davis, is still active as chairman of the board.

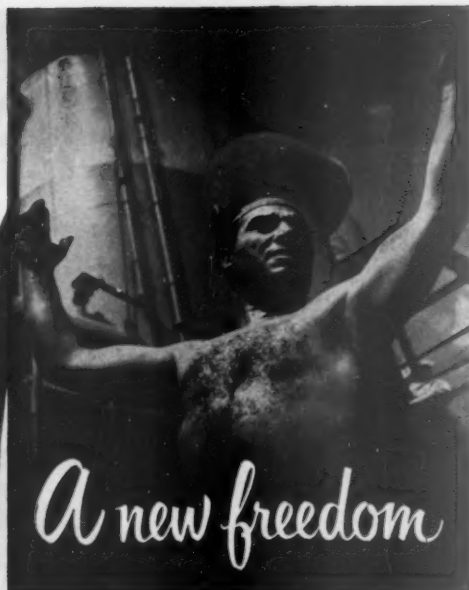
When Wilson joined Alcoa, he figured he'd missed the boat somehow, since the company had just finished an expansion program. He's long since made up whatever he lost. In World War II he directed Alcoa's \$300-million expansion concurrently with a \$450-million federal aluminum plant program. He's spending \$330-million now on more new plants. And there's no surety that he won't direct still another Alcoa expansion in that time of free markets he's looking forward to.

Having seen all that, Wilson doesn't shy at bogeymen. Neither does he blink at the broad new horizons opening up.

• **Restraint, Too**—At the same time, Wilson and his sages have learned not to count chickens in the shell. In Pittsburgh they're still chuckling at the salesman who, years back, toiled to find just the proper alloy for timepiece hands. Finally, the customer hailed the latest sample as exactly right.

No order, though—the customer said the samples would last him for 10 years.

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READERS REPORT

Three Strikes

Dear Sir:

I stubbed my toe on the assertion in the article "Why Industry Lures Pure Scientists" [BW—Jan.12'52,p40]: "Go way back to the steam engine, printing press, and the steam generator: You find the metallurgy was way ahead of the inventor. Metals on hand were always good enough to satisfy the toughest needs of new mechanical devices."

If you care to go way back, in the matter of steam, you will find that Oliver Evans was running considerably ahead of the materials at hand when he introduced high-pressure steam in America around 1800.

On the other side of the ocean Watt was so hampered by his materials (and perhaps by a mote in his eye) that he would not even try high pressure. Trevithick, who introduced steam locomotion on rails around 1808 and ran the first steam car on common roads 150 years ago last Christmas Eve, was continually dogged by failures of metal parts of his engines, although his theories were essentially correct.

Cugnot, usually credited with the first automobile in 1769, lost control of his machine through metal fracture.

Even as late as 1902-05, American auto makers were badly handicapped by Charlie Schwab's obstinacy in refusing to supply alloy steels.

Cast iron bridges of the early days had a bad habit of collapsing. Since American inventors were filing for patents on high-speed printing presses before 1800, I think I can hang three strikes on you.

CHARLES W. BISHOP

CLAUDE SCHAFFNER
ADVERTISING AGENCY
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Right Primer, Wrong Price

Sirs:

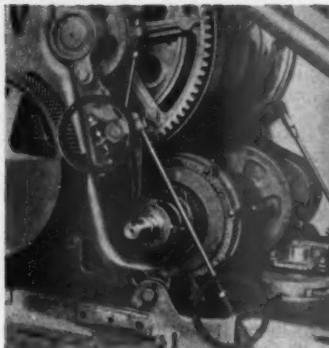
We appreciate the inclusion of the story on our new wash primer in BUSINESS WEEK [BW—Jan.19'52,p94]. Unfortunately, however, there was a mix-up on the price. Vorac-400 costs \$3.77 per gallon, not \$5.95 for five gallons.

M. E. PERKELL

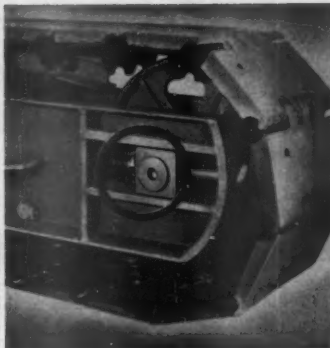
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Letters should be addressed to Readers Report Editor, BUSINESS WEEK, 330 West 42nd Street, New York 36, N. Y.

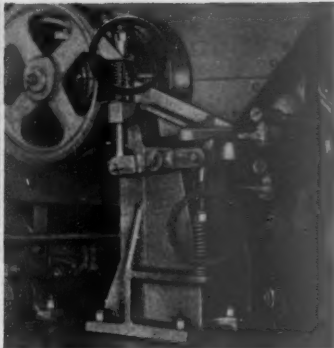
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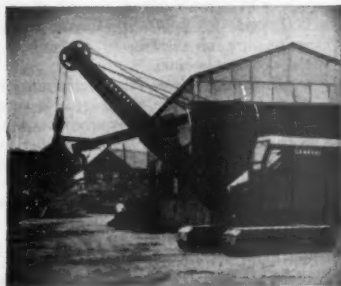


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☐ Elastic Stop Nut Bulletin

- ☐ Rollpin bulletin and sample Rollpins
☐ Here is a drawing of our product. What self-locking fastener would you suggest?

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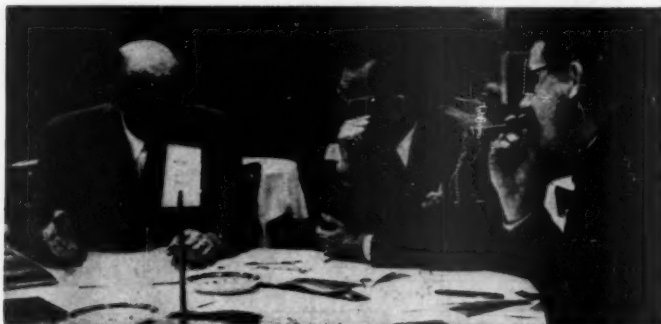
SMALL BUSINESS



CUTBACKS threatened the life of Home Window Co., Fostoria, Ohio—so officials George Hadacek (left) and Don Graves took their problems to the Cleveland conference. They talked to H. A. Swanson, U. S. Engineers Corps, (center), but...



NOTHING DOING HERE. So Swanson shunted them along to W. G. Gulderson (center), of the U. S. Bureau of Federal Supplies. Gulderson studied blueprints and plant capacity, came up with an idea which...



HITS PAY DIRT. J. P. Hurd of the U. S. Air Force (center) listed some of the things his branch of the services were in need of, worked out some of the details. Result: Hadacek and Graves went home with a gleam in their eye.

Little Men Get

The picture has looked anything but healthy for a lot of small manufacturers, particularly those who haven't been able to connect with defense work. Many whose civilian products depend on raw materials allocated by the Controlled Materials Plan are really in a bad way.

Washington finally heeded their cries for help, inaugurated a series of 14 conferences aimed at keeping the little guy from being frozen out entirely. The first of these conferences was held in Cleveland, where four officials of the Commerce Dept.'s National Production Authority and 12 officers of the armed services met with representatives of 120 of the hardest hit companies in that area.

• **Beefs**—It was an all-day session, with no time out for lunch. Each company representative had an individual conference with a government employee. President, sales manager, or purchasing agent had a chance to air his pet gripes. The gripes were many and varied, but the most frequently heard followed this pattern:

- We aren't on the lists to receive bids.
- Garage-sized shops are undercutting prices and getting all the work.
- The bid forms are so complicated that only specialists can figure out what the government wants.
- Prime contractors prefer to deal with other big companies or old buddies, and won't give us a chance.
- We can't afford to sock \$400,000 odd in new equipment unless we're sure of cashing in on some of the defense business.

• **Down the Line**—The manufacturers—practically all of them representing metal working industry—came armed with data on plant capacity, list of equipment, and other facts and figures about their business.

After listening to each one's take on hardships, the procurement officers and the Commerce-NPA people evaluated with the company representative his plant's capabilities and equipment for prime or subcontracts. Many of the businessmen were shunted from one branch of the armed services to another—meeting with as many as four procurement officers—in an effort to spot the items that their companies could produce.

• **Blue Sky**—Each company official was briefed on the four methods by which firms affected by low metal allotments can be aided: (1) by using substitute material; (2) converting to new product

Their Inning

lines; (3) government prime contracts; and (4) subcontracts.

Nobody went home with a defense contract in his pocket, but each had a better idea of the proper procedures and future possibilities. There was also a hint of increased allotments of metals in hardship cases—and all 120 companies were classified as hardship cases.

• **Own Bed-Making**—The conferences disclosed one thing that the company people would have sworn couldn't be: just as often as not the small company had double-crossed itself.

One purchasing agent wanted to know "Why, after the splendid record my company made during the war in producing for the Navy, aren't we on the list to receive Navy bids?" Some deft questioning disclosed that months ago the company—which makes a wide range of civilian goods requiring copper, aluminum, and steel—had received bids from the Navy.

At that time the company was getting ample raw materials for its civilian production, wasn't too interested in defense work—so it didn't send in its bid, and was removed from Navy lists. Sure, it had received bids from other agencies—in fact, the company had been awarded a scattering of small contracts. But now, with raw materials reduced to a trickle, the company needs contracts.

Government officials pointed out that possibly one of the main reasons this company hasn't received more of the larger contracts was that it hadn't taken enough time and care in preparing its bids. Its engineering force was busy redesigning its civilian products to permit use of substitute material, and its front office was spending its time scrounging around for raw materials. In the end, the purchasing agent started home for Dayton in a better mood: His company's name had been restored to the Navy bid list.

• **Outs**—An Akron manufacturer of storm windows and storm doors complained that he had been left high and dry without the aluminum necessary for his products. A conference with the government procurers showed him that his company could convert to a long list of products needed by prime contractors.

• **Also Present**—Probably the busiest people at the conference were the half dozen or so prime contractors who were on hand to line up subcontractors. They spent the day explaining their needs—and detailing tolerances and manufacturing methods.



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A New Start for an Old Art

If you asked the average American woman how she would like to weave her own cloth for a new dress, she probably would tell you that she would wear a flour sack first. But most women would jump at a chance to get a dress made of original-design, hand-loomed fabric—if they could do it without going bankrupt or working themselves silly.

Elphege Nadeau, Woonsocket, R. I., textile designer, is banking on this to revive the age-old art of home weaving—and to create a readymade market for a loom he has designed.

• **Easy as Pie**—With a Hand-Skill Loom, Nadeau says, a woman can create

a fabric of her own design as easily as she can run up a dress on a sewing machine. In five hours, say, she can weave enough cloth for a new spring suit or topcoat. Add another six to nine hours to cut and sew up the cloth into a garment.

This is a far cry from the time when home weaving was a cumbersome, tedious art, that required a lot of weaving know-how, patience, and strength—to say nothing of a lot of space. Nadeau's loom made of aluminum tubing weighs just 33 lb., takes the space of an ordinary home ironer. The price complete is \$145. And Hand-Skill Looms, Inc.,

will teach you all you need to know about weaving in no time.

• **In Tune With the Times**—Nadeau's hand loom marks the first change in weaving principles that's been made in centuries. What he did was substitute a sprocket type of hand wheel for the cumbersome harnesses that control the action of the big wooden frames on the orthodox looms. To change the cloth pattern on old looms you have to shift the position of the frames by a laborious treadle operation.

The new, wheel-type of loom head eliminates the treadles entirely. It has holes drilled in it for a variety of settings. You simply insert pegs in the holes to form sprockets, depending on the design you want.

• **Takes on Anything**—What raised the eyebrows of old hands in the mill business, though, is the range of fabrics Nadeau's loom turns out. For one thing, it will make anything from 2 in. to 76 in. widths in any of the three basic weaves: plain, satin, or twill. And the loom takes on any and all fibers—natural, synthetic, or blends—ranging from the sheerest silk to coarse carpeting or overcoating.

Designer Nadeau has been experimenting with fibers since he was 16. And he's turned up one or two blends that even the big mills haven't tried. His show piece is a shirt material of 50% wool yarn, 50% worsted yarn. It has the soft hand of a woolen shirt. But it has the strength and fineness of a worsted.

• **By the Hand**—Once he has sold you a loom Nadeau doesn't leave you completely on your own. Like the sewing machine people, Hand-Skill Looms, Inc., sells you service as well as equipment. The company takes you over the first hurdles of learning to run the thing, and will go as far along as you like in teaching you the fundamentals.

If you have trouble thinking up designs, Nadeau will do that for you, too. All you have to do is set the loom up on the kitchen table, throw the shuttle, and turn the wheel.

• **Branching Out**—Even though Nadeau thinks that his big market is opening up in apparel homecraft (a trend he thinks is shown by increasing sales of sewing machines), he doesn't intend to put all his pins in one cushion. He's already made sales to schools of design around the country and to therapy centers, as well as to individuals.

Right now, Hand-Skill Looms, Inc., has no sales organization as such: Looms are sold right out of the Woonsocket plant, mostly by direct mail. But this spring Nadeau plans to open three loomcraft centers on trunk highways outside of Boston, New York, and Philadelphia. There he will display looms, fabrics, types of services offered, and in fact, teach customers on the spot.

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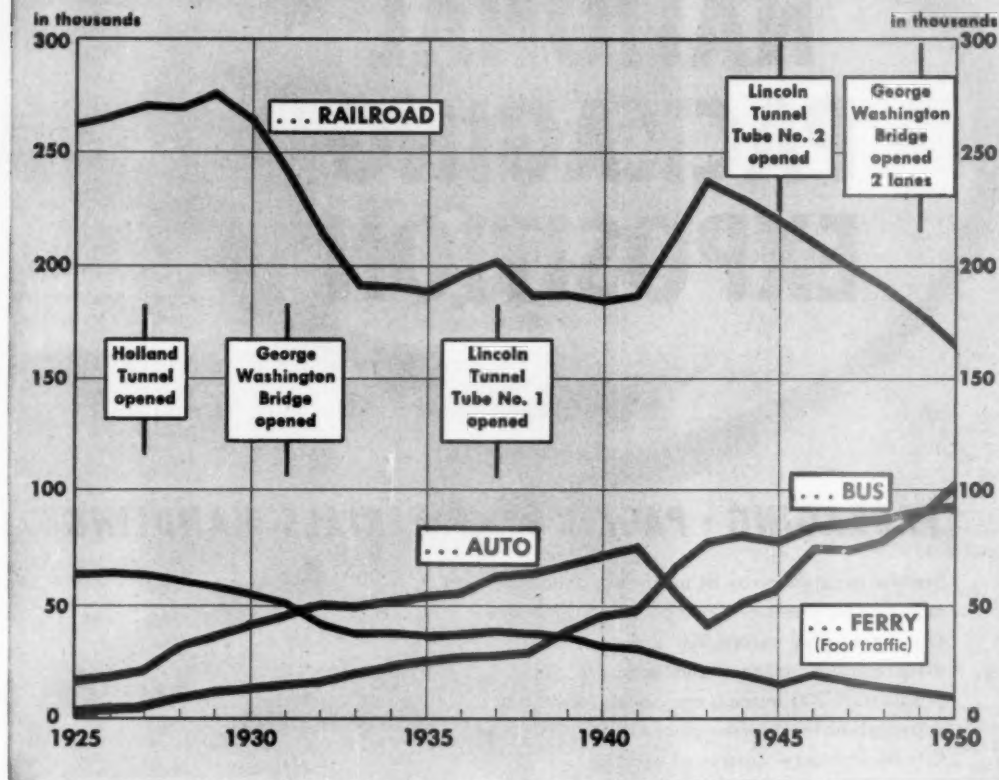


For information about the exposition and concurrent conference, address the American Management Association, 330 West 42nd St., New York City 18

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Commuting across the Hudson to New York City by - - -



NEW YORK CITY'S biggest commuter sector saw rail traffic drop, highway traffic climb as Hudson River crossings were built.

No One—But No One—Loves a Commuter

Every working day, 2-million Americans swarm out of their suburban homes. By train, bus, and automobile they head for jobs in the city. And every night they pour back to their homes again.

A BUSINESS WEEK survey shows this two-a-day mass migration is fast becoming Public Problem No. 1 for a dozen big cities from coast to coast. It's not so much a problem of how many commute as how they commute. The chart (above) shows what happened in 25 years in one sector of the New York City commuting area. You can see the shift from train to bus and auto as

each new highway bridge or tunnel was opened across the Hudson. The payoff: traffic jams, while rail service drops.

- **Get a Horse**—In midtown New York, this commuting trend contributes to the fact that crosstown auto traffic moves at an average of about 6 mph.—horsedrawn carriages 50 years ago averaged 11 mph. These figures were cited recently by E. E. Kearns, manager of the urban traffic division of General Electric Co. The same thing's happening in every city with a big suburban population.

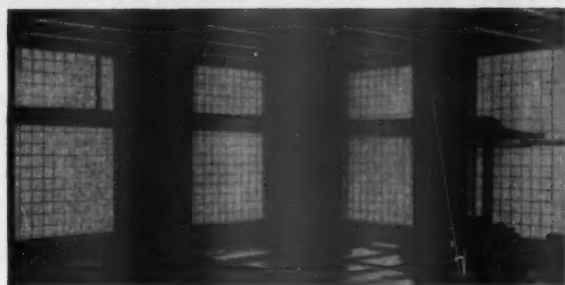
- **New Headache**—This is a fairly new problem. Twenty years ago, most com-

muters traveled in bulk—on railroad trains and high-capacity interurban cars. Today, most commuters travel in smaller units—buses and private autos. Reasons for this shift are easy to spot:

- Cities and states have spent billions of dollars on new express highways, bridges, parking areas—all attracting more commuters to the highway from the railway.

- Railroads insist they lose money on short-haul commuter service, and they've done little to hold onto their commuter patronage.

- Many new suburban developments have been far from rail lines,



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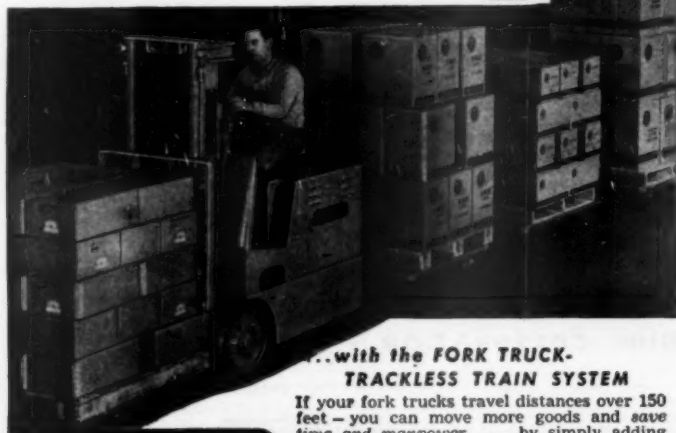
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forcing their residents to take to the road.

- Americans generally are so wedded to the wheel that driving to work—traffic jams or not—is the line of least resistance.

- Concerted Action—The result is a financial snarl, a population trend, a marketing shift, and a traffic jam all rolled into one. So many interests are involved that it will take a coordinated attack on the problem to do any good.

Broadly, here's how the problem hits:

- Cities suffer from the endless cost of building highways, bridges, tunnels, and parking projects. Business is lost and realty values depressed by traffic congestion. Transit systems are overloaded by out-of-town, nontaxable workers.

- Suburbs attract new residents in proportion to the quality of the transportation they can offer. Today, people can't get to and from their jobs as fast or as comfortably as they did 20 years ago. Depreciation of commuting service leads directly to depreciation of realty values.

- Carriers must reconcile rising costs of operation with the reluctance or inability of commuters to pay higher fares. Railroads—and some bus lines—are continually trying to divest themselves of money-losing suburban routes.

- Businesses have a stake both as employers and as shippers. Poor transportation brings up personnel problems: tardiness, low morale, maybe even loss of employees. Yet, as shippers, companies are complaining that the railroads' freight profit are subsidizing part of the loss on commuter service.

- The Nation, Too—Even the nation's transportation overseers are concerned with the commuting trend. Suppose gasoline and tires have to be rationed in some future emergency as they were in World War II. What would happen if rail passenger service had been allowed to fade away by then? Once the railroads have shed their short-haul passenger service, they'd never be able to restore it in time of sudden need.

- Topsy Growth—Up to now, the nation's suburban transit system has developed on a "grow as you please" basis. No metropolitan area has yet coordinated its control of commuter travel. Only one area—Boston—has even begun to integrate rail service and spend money on it.

Highway engineers have long recognized that building an expressway to meet current traffic needs breeds new demand. In commuting, it works like this: A new express highway is opened; this attracts more commuters to ride to work in buses and autos; the railroads then cut service, raise fares, or both; this drives more commuters to buses and autos; more express highways are built, and so on.

Cities also run into the parking prob-

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The commercial motor transport industry in 1950, while representing only 17% of the total motor vehicle registrations in the United States, contributed 32.6% of all the street and highway use tax income.

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"... The idea of spending money on rail service is new ..."

COMMUTERS starts on p. 96

lem. Regional Plan Assn. of New York City says that every trainload of commuters shifting to automobiles requires four acres of parking space—1½-mi. of both-side curb parking.

• **Carrying Capacity**—General Electric's urban traffic division set up this scale of carrying capacity of various means of transportation: one lane of a city street, with cross traffic, 1,000 persons an hour; one lane of a grade-separated freeway, 2,500 persons an hour; one lane of bus or streetcar traffic, 10,000 persons an hour; one track of express rapid transit, up to 60,000 an hour.

The answer to commuters' problems, the division says, is for municipalities to provide the rights-of-way for highspeed rail transit, just as they have provided streets, parkways, bridges, and tunnels for automotive traffic.

• **New Idea**—The idea of spending public money on rail service is new and controversial. The railroads themselves are cool to any form of subsidy. Taxpayers will have to be sold on the idea. And existing bridge, tunnel, and parkway authorities don't want another contender for the taxpayer's dollar.

• **City-by-City**—The commuting crisis varies all the way across the country. Boston depends most heavily on rail service, probably. Los Angeles is at the opposite pole, almost exclusively automobile. Here's what BUSINESS WEEK reporters found:

Boston pioneered public ownership of suburban transit. Fourteen cities and villages are grouped in the Metropolitan Transit Authority, which operates the rapid transit, streetcars, and buses. Operating deficits (\$5.4-million in 1951) are prorated among the 14 government units in proportion to use of the system. Boston is estimated to have about 240,000 commuters; most still use MTA routes, but 15% have shifted to automobiles since 1940.

New York has about 350,000 commuters from outside the city, according to Regional Plan Assn. The study showed an increase of only 19% in commuting since 1930, though the number of suburban households gained 50% in the same period. Rail commuting dropped from 263,200 to 239,350, despite a huge increase on the Long Island R.R.—from 47,600 to 75,000. Bus and auto commuting gained from 38,050 to 118,400.

Philadelphia moves about 85,000 commuters from outside the city, 50% of them by automobile. Train schedules are being cut. Traffic con-

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gestion is increasing, though one street-widening project (Vine St.) helps New Jersey commuters.

Washington knows the complexion of its commuting force but not its total—100,000 would be a fair guess. A 1948 study shows 57% commute by automobile, 39% by streetcar, bus, and train (the last almost negligible), 3% by taxicab, 1% afoot. Bus, streetcar, and cab fares have all been increased lately. The city has the advantage of wide streets, well-spaced government buildings; yet auto commuters find it necessary to seize parking spaces at dawn, finishing their sleep in their parked cars.

Pittsburgh is bucking downtown traffic congestion and rising fares on buses and streetcars. Railroads are trying to eliminate commuter runs, though they're rapidly dieselizing to cut costs. The city is spending \$9-million to build five parking garages downtown.

Cleveland depends heavily on two streetcar lines, five bus lines, and private autos. Railroad commuting is almost nil. Fare increases on public transportation send more people to autos.


Detroit is strongly pro-auto, though the Grand Trunk R.R. made a 25% gain this winter, thanks to wretched driving conditions following snowstorms. Grand Trunk has hit capacity in handling 4,000 commuters a day; Greyhound bus lines carry 25,000 commuters; the uncounted others go by automobile.

Chicago moves half its commuters by rapid transit, streetcar, and bus. Railroads and one interurban line carry about 15% of the total; the rest use autos. There's been a big shift from streetcar and bus to auto since 1948.

St. Louis estimates it has 165,000 auto commuters, 115,000 using bus or streetcar. The city is talking seriously about a Metropolitan Transit Authority on the Boston pattern, but dozens of St. Louis County suburbs will have to fall into line before anything happens. The state highway commission has O.K.'d a master plan for \$163-million of expressway construction in the next 20 years.

San Francisco has 50,000 to 55,000 commuters. From the north come about 4,000 by bus, 4,700 by auto. From the east, more than 15,000 travel by Key System Transit Lines train or bus, 8,000 by auto. From the south, 15,000 commute by Southern Pacific R.R., 7,000 by auto, a few by bus. Traffic congestion in the business district often cuts city streetcars and buses to 2 mph.

Los Angeles is wholly motorized. Traffic on streetcars and buses is dropping about 6% a year. Meanwhile, auto traffic jams extend 10 and 15 miles from the center of the downtown district.



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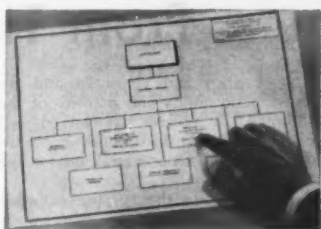
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Booming Business From Tired Oil Wells

There seems to be no end to the mounting U.S. demand for oil. Last year the nation soaked up a daily production of 6.1-million bbl.—60% more than 10 years earlier.

• **Hard to Get**—The big catch is that the oil industry is having more and more trouble keeping up with this demand. New wells are hard to find and expensive. So producers have to try to get every ounce of oil out of every well.

It's that job—increasing an oil well's productivity—that's the toughest of all in the industry. Because it can do it, Dowell Incorporated (subsidiary of Dow Chemical Co.) has become a highly prosperous business—even though several other companies have been able to do it in competition with them.

• **\$20-Million Business**—Last week, in fact, Dowell totted up its business for 1951, found that it had amounted to around \$20-million. And although in its 20 years of existence the company has broadened the base of its operations, by far the largest part of this business comes from its having been able to boost the output of tiring oil wells.

Basically, Dowell's business comes down to treating old wells with acids that open previously closed areas, en-

large cavities and channels, and increase permeability and porosity of the subsoil. The process has worked well enough to bring up millions of barrels of oil that otherwise would have stayed underground.

• **Expansion**—In the 10 years between 1941 and 1951, Dowell expanded by leaps and bounds: It increased its number of employees from 199 to 1,000, its number of jobs per year from 3,600 to 25,100, and the number of states in which it operates from 13 to 43.

• **Costs Plus Depth**—One thing that this shows is the way the oil industry is trying to make the most out of what it already has. New oil deposits are getting harder and more expensive to find—drilling costs have risen a good 90% in the last decade. And the average depth of oil wells drilled in 1951 ran at 3,871 ft.: 10 years earlier the average was 3,065 ft.

Besides going deeper—and paying more for every foot of drilling—oil producers have increased the number of wells tremendously. In 1951 they sank 44,500 wells, the greatest number in history and nearly 40% over the 1941 drillings. This year the figure will go up another 1,000. And the total for

1952 would hit 50,000 except for steel and other material shortages.

• **The Beginning**—It wasn't the demand for oil that all this indicates that put Dowell in business; instead, it came from the fact that back in the boom days of the 1920s owners of existing wells wanted to get more oil out of them to meet competition. With rival wells springing up all around, operators saw the need for securing greater recovery of oil from their old wells.

Oil-company geologists appealed to Dow Chemical Co. for help in solving the basic problem—cutting resistance of the oil flow through the rock to the well. Dow's experience in well-drilling for brine and in handling chemicals gave it an interest in the problem. It agreed to try to solve it.

• **Discovery**—Just at that point the booming twenties collapsed into the depression thirties. But instead of abandoning the project, Dow started a program of expansion and research. One of the most successful results of the research was development of a method to improve oil and gas well productivity through the use of inhibited hydrochloric acid. Dowell Incorporated was organized in 1932 for the prime pur-

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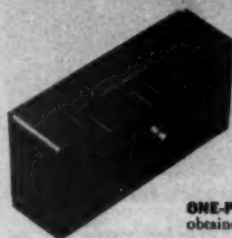
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Argus owners benefit from this molding even before they snap their first picture. With all undercuts, bosses, and lugs molded in, each piece is ready for rapid and accurate assembly without finishing...an obvious aid in holding down cost and assuring years of trouble-free operation.

Hence when Argus decided recently to replace the fiber flash holder, they naturally turned to their custom mold-

ers... and Durez plastics. The new holder needs fewer assembly operations. It looks better and has a firm, pleasing feel despite its light weight. Unaffected by moisture or changes in temperature, it is dimensionally stable... gives better service too.

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PETROLEUM starts on p. 102

pose of bringing its acidizing process to the oil fields.

Dowell didn't stop there. The experience it gained in the oil fields led the company to expand and improve its system to the point where it now uses it in other industries. Today Dowell uses chemicals to clean steam generators, heat exchangers, water lines, and a lot of industrial equipment of other kinds.

• **Complex Job**—The services that Dowell sells are far more complicated than they sound; it isn't simply a matter of pouring acid down a well. What acid it uses, in what proportions, and how depends on the particular job at hand. So its acidizing process must include diagnosis of well conditions, preparation of proper chemicals, and the application of highly specialized techniques.

Once Dowell has diagnosed the special conditions of a well, it must figure out how heavy a concentration of inhibited hydrochloric acid it should use. This varies according to the kind of subsurface rock and oil. Also, Dowell usually adds certain agents to alter the effect of the acid on the rock. (The inhibitors are probably the most important part of the preparation. Manufactured by Dowell, they are dissolved in the hydrochloric acid to protect exposed metal surfaces during the acidizing.)

• **Other Uses**—As a result of its development along these lines, Dowell has found that acidizing services are practical for many other oil field jobs than increasing oil or gas flow. It's also effective to loosen stuck drill pipe, to remove cement and carbonate scales, dissolve claylike minerals from sand formations, disintegrate mud sheaths, to boost input-well capacity. (An input well is one in which gas or water is introduced into the rocks to maintain pressure or to flush oil from sand to the well.)

• **Electric Pilot**—But it takes more than acid to do the job right. Dowell has developed some special equipment that makes a successful operation possible. The main tool is what it calls an electric pilot—actually a truck with an insulated cable and electronic instruments for recording data.

By using various attachments, this instrument can: (1) learn subsurface formation characteristics; (2) control induction of acid solutions; (3) determine where unwanted fluids enter the well; (4) perforate casing or open tight formations by means of shaped charges (explosives). One of its big features is

EVEN OUR COMPETITORS' BEST CUSTOMERS INSIST ON SUNOCO WAY LUBRICANT

In the competition for industry's lubrication business, all refiners are constantly improving their products. Every so often, one company or another finds a way to make a petroleum product that, for a particular use, licks to a standstill anything its competitors can offer. Immediately the others dig in and try to find the secret. Until they succeed, the originator's ingenuity pays off in a rising flood of sales.

That is the happy position in which Sun Oil Company finds itself with its Sunoco Way Lubricant. Since its introduction eight years ago, no other refiner has been able to match this tableway lubricant. Here is proof any man in metalworking can appreciate:

Sunoco Way Lubricant is insisted upon by 188 metalworking concerns which buy all their other lubricants from our competitors.

In other words, our competitors have loyal 100% customers, just as we have; but when it comes to tableway lubrication, loyalty goes out the window and Sunoco Way Lubricant is specified.

The reason for the success of Sunoco Way Lubricant is that no one has been able to equal it for *protection of tableways . . . ability to prevent "stick-slip" . . . prevention of table flotation . . . resistance to wiping off or squeezing out under heavy loads*. These benefits add up to higher production, better finishes, lower maintenance costs, longer tool and machine life. That is why Sunoco Way Lubricant is approved or definitely recommended by 38 of America's leading machine tool builders.

Want to see factual case histories and learn more about this product? Send for illustrated booklet, "Sunoco Way Lubricant." Samples are available, too, to companies in the metalworking industry. Write Dept. BW-2.

SUN INDUSTRIAL PRODUCTS

SUN OIL COMPANY, PHILADELPHIA 3, PA. • SUN OIL COMPANY, LTD., TORONTO AND MONTREAL





Coronado with Window Well

the answer for '52



Coronado with Window Bay

**only a gunnison
dealership offers
you so much**

interim financing
participation advertising
sales promotion aids
FHA—VA financing
variety of elevation
most complete package
quality, strength and durability
wood paneled interiors
technical assistance
prompt delivery
rail or truck shipment
franchised dealerships

Gunnison announces an "L" shaped home!

Out of tomorrow, GUNNISON brings you their latest . . . the Catalina . . . to take its place alongside the new '52 series of Coronado and Champion Homes! All GUNNISON HOMES are designed to sell in the \$7,000 to \$12,000 price range . . . America's mass market!

Fresh design and expert planning make all GUNNISON HOMES ideal for project building . . . many elevations, models and floor plans . . . and the only "L" SHAPED home in its price range! These homes feature Quick Erection, High Quality and Strength! They are delivered to the building site complete, except for plumbing, wiring and masonry work.

Here are the homes of tomorrow—your's to sell today! Sell the best—sell GUNNISON!

Investigate the possibility of including GUNNISON HOMES in your building program! For more complete information, write Dept. W-38, GUNNISON HOMES, Inc., New Albany, Indiana.



Catalina



"Catalina", "Coronado"
and "Champion"—T.H.
Gunnison Homes, Inc.

NEW ALBANY, INDIANA

Gunnison Homes

UNITED STATES STEEL CORPORATION SUBSIDIARY

"... There still is a good-sized amount of oil in the ground that can't be got out . . ."

PETROLEUM starts on p. 102

that it permits selective acidizing—that is, a technique of directing acid into a selected zone of the well, while other parts are untouched by it.

• **Plastics, Too**—Dowell has also used plastics on oil well problems with great success. Its parent, Dow Chemical Co., was one of the pioneers in the field of plastics research. As a result, Dowell made the first practicable use of plastics in oil well production problems in 1939. Since then, it has used liquid plastics as sealing mediums in thousands of oil wells.

Plastics have several uses in this area. In general, they help get rid of the flow of unwanted fluids such as water, repair cement failures, and so on. They do this by entering a formation, then hardening into a solid. A special plastic is used to consolidate loose sands. This plastic binds the sand grains together without obstructing the flow of oil.

• **Research Pays**—Dowell has been able to develop all these things mainly because it is a bug on research. Last year it spent \$400,000 just on that part of its operation. It maintains two laboratories: a chemistry lab with 25 employees, and an engineering lab with 18.

The record shows that the research has paid off. The company's services have broadened out into all kinds of other areas that can benefit from the use of its inhibited cleaning agents. Last year, for example, Dowell cleaned a wind tunnel in Cleveland of old paint, oil, grease, rust, and other residue that had cut down its efficiency.

Because the tunnel varied in diameter from 20 ft. to 51 ft. and was about 600 ft. long, Dowell spent a year of preparatory research figuring out the best way to clean it. When it came to actually doing the job, it took two days. By hand, it would have taken months.

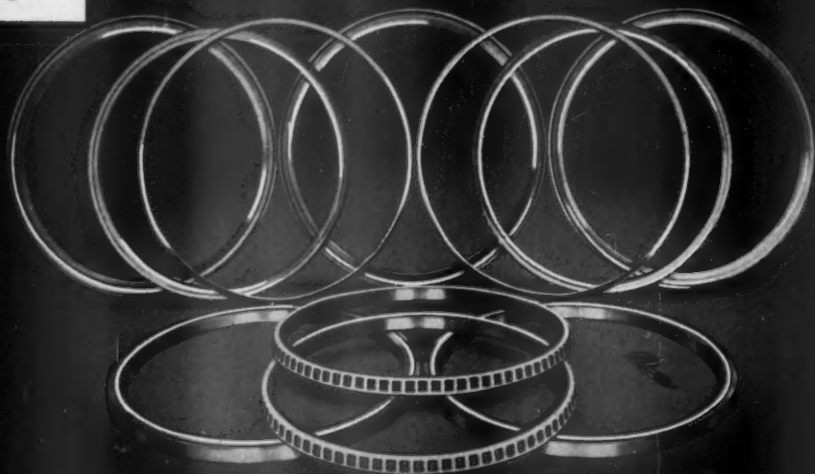
• **Varying Costs**—The average Dowell job runs at about \$1,100. One of its highest-priced jobs was tagged at \$42,500. That was for cleaning an 82-mile, high-pressure, 4-in. gas line.

On the whole, however, Dowell's real future still seems to lie in oil. There still is a good-sized amount of oil in the ground that can't be got out. A lot has already been done to get at it over the years, but technical men concede that a lot more remains to be done still. Dowell's methods, constantly improved, will help out. And as long as the oil demand keeps growing, the company itself should prosper at an even greater degree than it has already.



Contact **KAYDON** Muskegon

FOR ALL TYPES OF BALL AND ROLLER BEARINGS: 4" BORE TO 120" OUTSIDE DIAMETER



KAYDON Tapered Roller Bearings 16.500" x 18.750" x 0.875"
with KAYDON Bronze Cages, silver plated, for high speed acceleration

Safe Way to Reduce Weight

Look again at this thin section bearing. KAYDON bearings like these, designed with very thin section, are a boon to design engineers who recognize weight-reduction and greater precision as prime problems today.

KAYDON Thin-Section Tapered Roller, Straight Roller, and Ball Bearings are helping solve such problems. All types can be made unusually light in weight, and permit

much more compact machine design.

Unique high precision techniques that hold to closest tolerances in bearings as large as 120 inches outside diameter, assure consistent accuracy in all types and sizes of KAYDON bearings and needle rollers.

★ ★ ★

For your precision bearing requirements, contact KAYDON of Muskegon . . . Dept. B.

KAYDON Types of Standard and Special Bearings:
Spherical Roller • Taper Roller • Ball Radial • Ball Thrust
• Roller Radial • Roller Thrust • Bi-Angular Bearings

KAYDON
THE ENGINEERING CORP.
MUSKEGON • MICHIGAN
PRECISION BALL AND ROLLER BEARINGS

MARKETING

Food-Store Magazines Pull in Advertisers

Magazine (How Distributed)	Advertising Revenue		Percent Change
	1950	1951	
Woman's Day (A&P: 4,500 stores)	\$7,138,302	\$9,378,602	+ 31.4 %
Family Circle (Safeway, Kroger, and 12 other chains: 8,500 stores)	4,462,875	6,649,756	+ 49.0 %
Everywoman's* (National Tea, Food Fair, and 58 other chains: 3,500 stores)	—	1,492,734	—
Better Living* (Independent supermarkets, members, Super Market Institute: 4,000 stores)	—	1,229,645	—
Western Family (11 Far West wholesalers, members, National Retailer-Owned Grocers: 6,500 stores)	900,377	1,213,932	+ 34.8 %
American Family (Red & White, IGA, and other voluntary chains: 12,000 stores)	123,294	241,322	+ 95.7 %

*1951, first year

Date: Publishers Information Bureau; Western Family and American Family figures from Advertising Age.

Food-Store Magazines Hit the Big Time

The magazines distributed through grocery chains, supermarkets, independents, and cooperative groups chalked up a total gross advertising revenue of some \$20-million last year. Stack that up against the \$12.6-million for 1950, and you have some idea of where they're going.

The food-store magazine looks good to everybody concerned:

- For the publisher it offers a dream setup with distribution costs whacked to a minimum.

- For the customer, it's a buy at a bargain price.

- For the advertiser, it means a big audience—pinpointed on the housewife.

- For the retailer-distributor, it means extra profits and goodwill.

- **Publisher's Gain**—The low cost of distribution is the overwhelming asset from the publisher's viewpoint. Magazines usually are distributed about half by subscription—through the mails—and half by newsstand sales. Either way involves a big, expensive operation. And the new postal rates this year will add to the headaches.

The publisher of the supermarket

magazine has none of this worry. The case of *Woman's Day* is typical. Here, distribution consists simply of sending copies by rail or truck to the 37 warehouses of Great Atlantic & Pacific Tea Co. From there, they are trucked to the stores, right along with the groceries.

This explains how the publisher can retail his product for a nickel—seven cents for *Woman's Day*—and not lose his shirt.

- **Housewife's Choice**—The low price, in turn, helps sell the magazines. So does their editorial content. All contain some fiction. But they are primarily "how to do it" primers. They tell the housewife how to cook economically, how to bring up her children, how to clothe them and herself, how to take care of her house. To the budget-minded, this makes good sense.

It's a good formula today for another reason. The stepup in family formation (BW—Dec. 8 '51, p146) means a lot of new housewives, many of them young, who want help at their new job.

- **Advertiser's View**—Naturally, the advertiser is watching this growing medium. Roughly 12-million women a month plunked down the price of a

magazine in their favorite food store last year.

As a result, the leaders in the field are hard on the heels of the big women's service magazines. *Ladies' Home Journal's* last audited circulation (March, 1951) was 4.6-million. That same month *Woman's Day* hit its peak of over 4-million.

- **Pinpoint**—The great advantage of this market to the advertiser is that he knows exactly who it is. He knows he must pitch his copy to the lady who controls a good part of the family purse strings. And with advertising costs rising, a seller wants his copy to count.

- **Good Looks**—Family Circle's president, P. K. Leberman, cites another major factor that pulls in the advertiser: the improved appearance of the magazines. *Woman's Day* goes along with this. "We are fanatically proud of our product," says a spokesman.

In fact, *Woman's Day* feels strongly that it should not be classified in the food-distribution field at all, but in the same category with the women's service magazines.

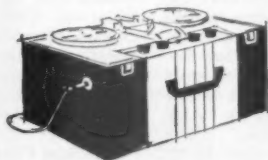
- **Key**—In a sense, both the advertiser's and the reader's growing re-



Lincoln learned with charcoal, but your children have this versatile teacher

The youthful Lincoln "did his sums" with charcoal before an open fire—but today's children can absorb much learning quickly through Webster Electric's Ekotape recorder, the high-fidelity recorder-reproducer which daily is gaining added stature as an educational force!

Ekotape is more than just a versatile teacher; it is a valued tool in business and industry, a ready helper in church, a limitless source of home entertainment. . . . It is a product of Webster Electric Company, pioneer manufacturer of electrical, electronic and mechanical aids which contribute much to the welfare and convenience of Americans—in business, in government, in



education and in the home.

Under peacetime and wartime economies alike, Webster Electric has steadily advanced in the development and application of many skills . . . engineering, designing, manufacturing skills, some of them highly unusual . . . toward creating and building a wide range of products to meet today's needs—and to anticipate tomorrow's!

Ekotape recorders, in a variety of models, are among these advanced products. A few others are mentioned at the right. . . . All bear the Webster Electric name. All share Webster Electric's unchallenged reputation for quality and performance. This we cherish—this we are pledged to keep always!



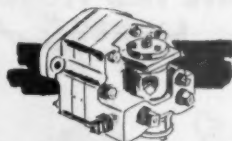
WEBSTER ELECTRIC

RACINE • WISCONSIN

"Where Quality is a Responsibility and Fair Dealing an Obligation"



Teletalk—aristocrat of intercommunication systems—provides instant two-way conversation between individuals and departments. Just flip a key and talk! Saves time, waste motion, energy. Used by large and small businesses, industries, institutions, government agencies.



Hydraulic Pumps—Webster Electric manufactures a variety of gear-type hydraulic pumps of advanced design, suitable to a wide range of industrial and agricultural applications in the field of servo- and power-hydraulics; also, small pumps for circulating lubricating oil under hydraulic pressure.



In more than two million homes heated with oil, more dependable heat is enjoyed year in and year out because the oil burners are equipped with Webster Electric Fuel-units and Transformers—"the heart of an oil-heating system."



Has the tone quality of your record-player deteriorated? Perhaps the pick-up cartridge has grown "tired." If so, the full beauty and richness of the original tone can be restored by replacing the old cartridge with a new Featheride Pickup Cartridge—another Webster Electric product.

*Give blood...
+ save
a life!*

Webster Electric Co., Racine, Wisconsin

Please send me information on items checked below.

- | | |
|---|--|
| <input type="checkbox"/> Ekotape Recorder | <input type="checkbox"/> Teletalk |
| <input type="checkbox"/> Featheride | <input type="checkbox"/> Fuel Units & Transformers |
| <input type="checkbox"/> Pick-up Cartridges | <input type="checkbox"/> Hydraulic Pumps |

Name _____

Address _____

City _____ State _____

**"WHEN YOU MEN
FIND OUT
WHAT'S NEW
AT THE
PLASTICS SHOW
I'M BETTING YOU'LL
HAVE THIS THING
LICKED"**



Every facet of the vast plastics industry will be concentrated in Philadelphia's Convention Hall. You will see what's new in research, raw materials, machinery, and production techniques. If there's an answer to your problem in the plastics industry, you'll find it at the Exposition. *This exposition is not open to the public. Requests for admission tickets should be written on your company letterhead directed to THE SOCIETY OF THE PLASTICS INDUSTRY, Inc., 67 W. 44th Street, New York 18, N.Y.*

**1952 NATIONAL
PLASTICS
EXPOSITION**

**PHILADELPHIA
CONVENTION HALL
MARCH 11 - 14, 1952**

sponse stems from the phenomenon of today's retailing: the growth of the supermarket. Self-service means preselling, Leberman points out. And to presell, a manufacturer must advertise.

Significantly, food-store-magazine advertisers are no longer food manufacturers only. Food products still predominate, but many nonfood makers have stepped into the picture, especially in the bigger magazines.

• **Newcomers**—The influx of ads for drugs, beauty aids, and cigarettes reflects the addition of these lines to supermarket wares. But the magazines also carry ads of products you can't find on the grocer's shelf: General Electric, Thor, Presto, Cannon Mills, Necchi sewing machines, etc.

Woman's Day reports that, of its total of 436 advertisers last year, 245 make products that aren't sold in grocery stores at all. Of its 146 new advertisers in 1951, 101 don't sell in grocery stores.

• **Retailer's Gain**—The retailer makes a little money—usually about a cent a copy—practically painlessly. He wins some goodwill; and the magazines help take the curse of impersonality off self-service stores. They also give some of the chains a chance to advertise their private brands.

• **Pudding's Proof**—The entry of Better Living last year and the reappearance of Everywoman's attest the field's growing lure.

By now, in fact, the magazines have pretty much staked out the whole field. The top three—Woman's Day, Family Circle, Everywoman's—have most of the chains sewed up. Better Living covers the independent supermarkets—both chain and individual stores—that are members of the Super Market Institute. Western Family operates through retailer-owned wholesaling outlets. American Family covers the independent self-service field, mostly voluntary cooperatives.

• **Rundown**—All the publications use the same basic editorial formula. But a quick rundown of the field points up some of the differences:

Woman's Day, tops in both circulation and advertising revenue, was started with A&P money back in 1937. It went from 32 pages to (this month) 224. The price climbed from two cents to seven; circulation climbed, too.

The magazine says it is in no sense an A&P organ, though it is a wholly owned subsidiary of the Tea Co. "A&P runs its show; we run ours," says a spokesman. There are no deals to tie advertising into food-store sales.

Promotion aims at the advertiser, not at circulation. The magazine has an advertising budget of about \$300,000.

Its chief merchandising gimmick is its Fashion Fabric Plan. Woman's Day makes up a mailing piece for

fabric buyers of 200 stores. This tells the stores two months ahead of publication what patterns the magazine will be featuring. Then WD lists the stores that stock fabrics to suit the pattern.

Family Circle is No. 2 in both circulation and advertising revenue. Beginning next month its circulation guarantee will be 3.5-million. Besides being the patriarch of the lot (it was founded in 1932), it claims to represent the biggest chunk of food sales of any—\$3.5-billion yearly for all 14 chains.

Family Circle's Fashion Forecast is similar to Woman's Day's Fashion Fabric Plan. It tells buyers of department stores what clothes the magazine will feature. Stores then tag clothes "As seen in Family Circle."

Everywoman's, owned largely by such big chains as Food Fair, Colonial, and National Tea, covers 60 chains. Its guaranteed circulation is 1.5-million. President Paul Hunter says that the magazine advertises for both circulation and advertisers, promotes tie-ins.

Better Living reported advertising revenue of \$1.2-million for its first eight issues. McCall's owns a controlling interest; sponsorship by Super Market Institute (which is not an owner) gives it some 400 distributors with 4,000-odd outlets. Better Living goes along with the Big Two in selling advertising space only. It hopes, however, that the stores will do some promoting of their own.

Starting this March, its rates are based on a 1.5-million circulation, plus 300,000 in Canada. Even this early in the game, it is close to being in the black.

Western Family, headquartered in Hollywood, is the only magazine of the lot that is distributed free. It goes to the customers of 6,543 stores, outlets of 11 retailing-owned wholesaling cooperative groups that make up the Pacific Mercantile Co. in San Francisco. Pacific Mercantile is the West Coast branch of National Retailer-Owned Grocers; Certified Grocers of California is its biggest member. The latest audit showed a circulation of 831,960, plus complimentary copies.

Western Family is strong on merchandising aids. It has a staff of 21 working with the major buying units of the stores. They give advice on tie-in displays, advertising, and the like. Just recently, Charles Glass, copublisher with Edgar Seymour, set up a school to teach his merchandising staff and space salesmen food distribution from A to Z.

American Family, of Chicago, is last on the list. But it racked up a 95% increase in advertising revenue last year. Its circulation guarantee is 750,000; this February circulation reached 850,000—up 500,000 since last June. Like Western Family, American Family specializes in merchandising aids.



Badgered by tubing problems?

SWITCH TO BUNDYWELD



Bundyweld Tubing is double-walled from a single copper-coated steel strip. Exclusive, patented beveled edges afford smoother joint, absence of bead, less chance for any leakage.

Harassed by poor performance in your tubing parts? By erratic tubing behavior in your fabrication steps?

Then switch to Bundyweld, the only tubing double-walled from a single strip, with inside and outside beveled edges.

This multiple-wall type of Bundy® tubing speeds down hundreds of production

lines without a hitch. It sets stiff performance standards in thousands of tubing uses, such as refrigeration condenser and evaporator coils, radiant heating grids, fuel and brake lines in 95% of today's cars.

For technical information, or design or fabrication help, write Bundy Tubing Company, world's largest producer of small-diameter tubing.

Bundy Tubing Company

DETROIT 14, MICHIGAN

WORLD'S LARGEST PRODUCER OF SMALL-DIAMETER TUBING • AFFILIATED PLANTS IN ENGLAND, FRANCE AND GERMANY



"A gallon of coal oil, please!"

You could always tell when it was Saturday. Regular as payday, young Aggie showed up at the general store with her weekly order. It was important business. In wintertime the little oilstove she refueled was the only thing that made the traditional Saturday night bath bearable.

A million Aggies laugh about it now. Today their job is done by the modern fuel oil trucks you take for granted. Effortlessly, economically, they keep America's fuel oil needs supplied from crossroads to metropolis. Behind them, tracing the entire complex course of petroleum production and distribution, are other busy segments of our

vast and powerful motor truck fleet.

Yes, trucks are vital to America's commerce. And nowhere in this mighty chain is there a link more important than the truck axles that carry, move and stop the load. That is why The Timken-Detroit Axle Company takes



such healthy pride in the pioneering part it has played in truck development for more than forty years.

You find the Timken-Detroit name spread across the earliest pages of motor truck history. Timken-Detroit engineers have made their contribution to every noteworthy advance in axle design and construction. Timken-Detroit Axles and Brakes are today *The Accepted Standard* for quality and dependability throughout the world.



**WORLD'S LARGEST MANUFACTURER OF AXLES
FOR TRUCKS, BUSES AND TRAILERS**

**PLANTS AT: DETROIT AND JACKSON, MICH. • OSHKOSH, WIS. • UTICA,
N. Y. • ASHTABULA, KENTON AND NEWARK, O. • NEW CASTLE, PA.**

MARKETING BRIEFS

POST

IN THIS ISSUE

One of the Great Books of Our Time:

WHITTAKER CHAMBERS' OWN STORY OF THE HISS CASE

A story that, for the first time, will show you the true dimensions of the communist threat to America

To ballyhoo a series of articles by Whittaker Chambers, Saturday Evening Post appeared without a picture on its cover this week for the first time since September, 1899. Chambers, key witness in the Alger Hiss case, got \$75,000 for his Post articles—the most the Post ever paid to one person, it thinks.

Price tags on men's suits were slashed \$3 by Richman Bros., manufacturer with 67 stores; that puts Richman suits back to pre-Korea prices. Industry-wide poor business (BW—Jan. 26 '52, p19) was the reason, said George Richman, president. Falling prices of wool made the cut possible.

Drugstore sales in 1951 finally pulled up from their plateau (BW—Dec. 9 '50, p66). They hit a peak of \$3.9-billion, up \$264-million from 1950. Most of the rise stemmed from higher prices; Drug Topics reports that while unit volume was up slightly from 1950 it was still below 1947. Using 1947 as 100%, unit volume for 1951 was only 95.2%.

Insurance against food spoilage is the latest sales lure of Crosley home freezers. The optional policy, good for three years, covers spoilage due to outside power interruption or any mechanical failure of the freezer.

Hearings on the McGuire bill to get fair trade on its feet again (BW—Dec. 29 '51, p79) start on Monday before the House Interstate Commerce Committee. That's a break for fair traders; this committee is supposed to be friendlier toward them than Rep. Celler's Judiciary Committee, which is slated to start hearings on fair trade legislation later in the month.

BUSINESS WEEK • Feb. 9, 1952

215 TONS Safely handled with KEYSTONE ROPE WIRE!



Wire rope to lift a ladle full of molten steel is just one dramatic example of wire use that requires flawless uniformity. The physical properties, tensile strength, structure—all must conform to exacting specifications for quality rope. Keystone Ropewire regularly meets those specifications by extreme care throughout manufacture.

INDUSTRIAL WIRE SPECIALISTS

The regular uniformity of all Keystone industrial wire is attained by careful selection of specially prepared steel, slow and meticulous processing and rigid inspections.

The same care and attention will be given to the wire you require for your product regardless of type and quality.

For your industrial wire problems consult with Keystone's Industrial Wire Specialist.

Keystone Steel & Wire Company
PEORIA, ILLINOIS

More
SCRAP
today...
More
STEEL
tomorrow!



Everybody's FOR this "Control"

IN every washroom where you have MOSINEE "Towel Control" installed, you'll get credit! Everyone likes it. One MOSINEE Towel . . . softer, more absorbent . . . does the work of two or more others. Fewer towels needed . . . and fewer towels used because MOSINEE Sentinel Towel Cabinets reduce towel consumption by an average of 30% or more. Towel costs go down . . . and these towels please all users. That pays! Write for name of nearest Distributor.



THE BRANCH STORE:

1950 Median Operating
Results of
Branch
Stores Main
Stores

➔ It has some disadvantages, compared with the parent store:

1 Fewer stock turns (times per year).....	4.84%	4.98%
2 Less sales per sq. ft. of selling space.....	\$74.32	\$82.16
3 Lower average gross sale.....	\$4.31	\$4.68
4 Higher real estate costs (% of net sales).....	3.16%	2.28%

➔ It has some advantages, too:

1 Fewer returns (% of net sales).....	7.62%	10.58%
2 Less total expense per transaction.....	\$1.01	\$1.39
3 More selling space (% of total space).....	71.86%	39.95%

➔ And since the branch "lives off" the main store, it also has:

1 Lower markdowns (% of net sales).....	4.5%	6%
2 Lower payroll costs (% of net sales).....	13.25%	18.64%
3 Lower advertising costs (% of net sales).....	0.95%	2.75%

Data: Division of Research, Harvard Graduate School of Business Administration

Sizing Up the Branch Store

The table above is the first batch of solid statistics that retailers have ever had on branch store operations. It doesn't by any means tell them everything they would like to know but it is a start toward answering some of the biggest questions in the department store business today.

For instance, how profitable are branch stores? What kind of operating results can you expect from them? Do they cut into the volume of the parent store?

Questions like this have bothered retailers more and more during the past few years. Branch stores are comparatively new in the U.S., but they've been springing up fast. As a result, there's a big need for data. And there hasn't been time to gather nearly enough.

• **Filling the Gap**—Last week the Harvard School of Business Administration helped meet the need by publishing "Operating Results of Department and Specialty Store Branches."

This is the result of three years' work by Milton P. Brown, assistant professor of business administration. Brown's study is similar in treatment and scope to the school's long-established annual job on the operating results of department and specialty stores.

The data in the report are compiled from material gathered from 25 parent department stores with 56 branches,

and 17 specialty stores with 48 branches.

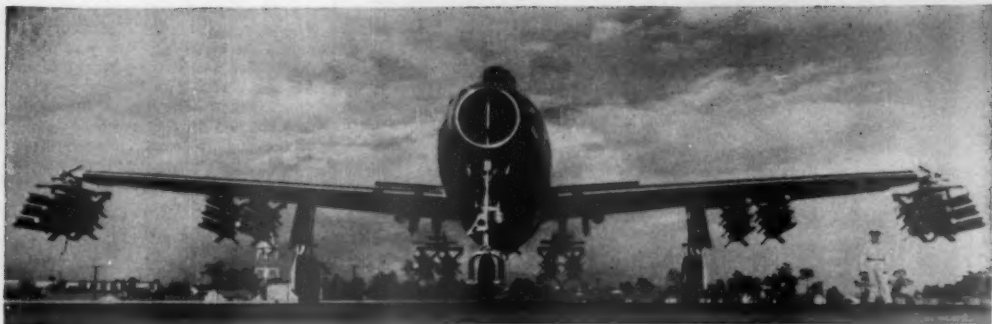
• **Tentative Answers**—Retailers will be thankful for the solid statistics presented by Brown. It will give them a yardstick for their own operations. But they will also note that Brown has left a lot of the ifs and buts about the branch store business unanswered. Brown himself stresses the tentative nature of the study.

Take the question of how profitable branch stores are. Brown says that branches give parent stores certain "natural advantages," such as bigger volume. In any case, stores that go in heavily for branches seem to do better profitwise than those that don't.

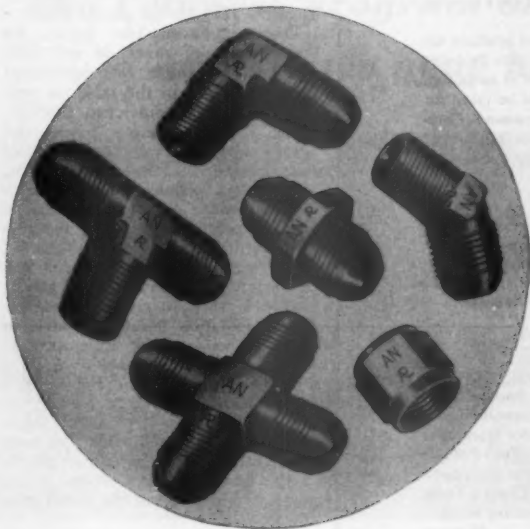
But Brown refuses to take this as absolute evidence of cause and effect. "It is possible that their better profits stem from more efficient over-all operation and hence should be attributed to the general competence of their managements rather than to the fact that they are engaged in the operation of branch stores."

• **The Difficulty**—What makes it so hard to pin down the problem of branch-store profit? The answer is bookkeeping. A lot of the profits made by branch stores are simply bookkeeping profits.

To a considerable degree, says Brown, the department store and specialty store branch "lives off" its parent store down-



ENDURO Flies with the Thunderjets



Parker AN fittings, manufactured of Type 316 ENDURO Stainless Steel by Parker Appliance Company, Cleveland, Ohio, fly with Republic Thunderjets and with many other aircraft.

Machined fittings for aircraft hydraulic control systems must, above all, be strong and tough. They must contain pressures as high as 3000 pounds per square inch and possess high safety margins. They must fight off all attacks of corrosion and of fatigue. They must resist the effects of sudden changes in temperature and pressure.

The material to provide *all* these qualities, yet be economical to forge and to machine? It's Republic ENDURO Stainless Steel, in free-machining grades, both hot rolled and cold drawn bars. For other applications, ENDURO also is manufactured in sheets and strip.

Outstanding among ENDURO's special properties is its long useful life under the most severe operating conditions. It resists rust, corrosion, and the action of most acids and alkalies; resists fatigue; fights scorching heat and sub-zero cold; resists abrasion; and is easy to clean and to keep clean. Among the strongest and toughest of commercial metals, ENDURO still is readily workable.

For your new products, new processes, and equipment replacement programs, think ENDURO. Republic metallurgical and technical staffs stand ready to work with you on any future development . . . and to help you get the most from the many analyses of ENDURO Stainless and Heat-Resisting Steels available now. Just write:

REPUBLIC STEEL CORPORATION

Alloy Steel Division • Massillon, Ohio
GENERAL OFFICES • CLEVELAND 1, OHIO
 Export Department: Chrysler Building, New York 17, N. Y.



Republic ENDURO
FREE-MACHINING
STAINLESS STEEL



Other Republic Products include Carbon and Alloy Steels—Pipe, Sheets, Strip, Plates, Bars, Wire, Pig Iron, Bolts and Nuts, Tubing

Rockwell Report



by **W. F. ROCKWELL, JR.**
President
Rockwell Manufacturing Company

WHEN WE HEAR THE ORATORY that breaks out in Washington from time to time concerning decreasing competition, we wonder what industries they're talking about. Certainly our experience is to the contrary.

Take our valve business, for instance. When our Nordstrom valves were first introduced some 25 years ago, perhaps a dozen manufacturers got all the business in the petroleum and gas industries. Today, even in a so-called sellers' market, there are often fifty valve makers competing for every major order, and month after month, in sales call reports, we see the names of new manufacturers we have never heard of before, getting business.

It's equally true in the machine tool field, where our Delta Power Tool Division pioneered the manufacture of light, high-precision tools for industry and home workshop use. Once Delta stood almost alone, but as soon as it was demonstrated that there were sales to be made—that there was a growing market—competition blossomed.

The point is, so far as we are concerned, since most of our products are sold in expanding markets we find constantly growing competition. Probably we've benefited from it, because in our company's history, we've never seen the time that business was so good that the customer could be taken for granted, or that we could cut back on product improvement research. Competition has kept us young, and as long as we choose to operate in industrial markets where the opportunity to make sales is reasonably constant, it undoubtedly always will.

Among the growing uses for Liquefied Petroleum Gas is for powering buses. San Antonio Transit Company is typical of a transportation system that is finding fuel economies in LP-gas. It is typical, too, that the San Antonio company's fueling system is controlled by Rockwell-built Nordstrom valves.

Quick case histories of production savings through use of Rockwell-built Delta power tools: Four-Wheel Drive Auto Company in Wisconsin uses a Delta abrasive cut-off machine for cutting metal moulding for truck cabs and gets ten times faster production than previous methods . . . Reed-Prentice Corp., Worcester, Mass., uses a single Delta 17-inch drill press to machine 57 different parts . . . Kirkhof Electric Co., Grand Rapids, Mich., put a Delta 17-inch drill press on an overhead crane and now drills holes in any location on 36 x 96 inch switchboard panels without moving them . . . National Scientific Products Co., Chicago, cuts wafer-thin quartz crystal for communication instruments on Delta 14-inch drill presses fitted with abrasive wheels.

Rockwell Manufacturing Company had its biggest year of shipments in 1951. Total shipments were in excess of \$99,000,000, compared with the previous high of \$71,556,000 in 1950. The 1951 backlog exceeded \$23,000,000 as against \$22,000,000 in 1950. However, this year's figures do not include defense contracts which amount to several million dollars. From late 1944 Rockwell has expanded from four manufacturing plants to seventeen.

One of a series of informal reports on the operations and growth of the
ROCKWELL MANUFACTURING COMPANY
PITTSBURGH 8, PA.

for its customers, suppliers, employees, stockholders and other friends



town. This is particularly true in the case of payroll and advertising expenses. The downtown store's personnel provide a lot of work in the way of handling stock and services for the branch. But the branch isn't charged for its fair share of these services, says Brown. Nor is it charged for the benefit it gets out of the downtown store's advertising.

And the services rendered by the parent store have another important effect. They make it possible for the branch to put most of its space into selling, whereas the downtown store has to have most of its space tied up with warehousing, servicing, etc. This means that about 70% of the branch's total area is productive—a major factor in the branch's good profit showing.

Along with this, the branch has a lot of other advantages—far outweighing the disadvantages that stem from its low volume.

As a result, total expense in the department store branch ran 24.62% of net sales in 1950, as against 32.54% in the parent store. The branch had net operating profits of 8.46%, as against 4.27% for the parent store.

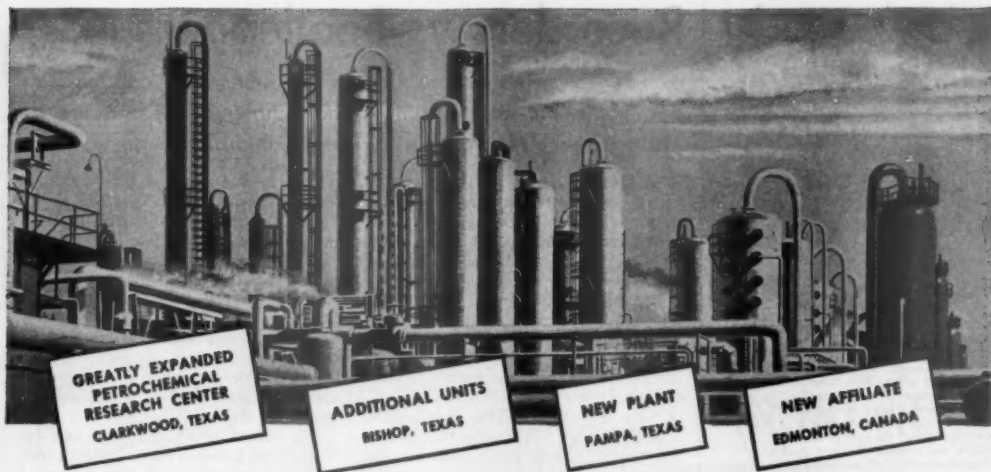
• **Distance Factor**—The figures for branch specialty stores do not differ greatly from those for department stores, as shown in the table on page 114. One major difference, however, is the distance between parent and branch store. The average department store branch is 12 miles from home, the average specialty branch store is 35 miles away. And it is not uncommon for specialty stores to put branches clear outside their trading areas.

One reason for this is that many specialty store—like Bonwit Teller in New York—feel that their names have national reputation because of style or swank. Also, stocking up a specialty store is an easier job than it is for a department store, where the stock is broader and bulkier.

• **Changes**—There are some major trends at work in the field. The most important one is the fast rate of growth in the branch store's volume. It has way outstripped that of the parent store downtown.

This is having some important effects. It means that branches are growing up to their big shiny new plants. Bigger volume in turn may help to reduce some merchandise costs by tending to increase such factors as sales per sq. ft.

• **Raised Finger**—Brown's study ends on a cautious note. No one really knows, he points out, whether or not branches are "detrimental to the growth of their parent store." Also, he adds pessimistically, it may be that competition is forcing the construction of too many branches, creating a "surplus of store capacity." This, of course, would have a severe effect on parent store volume.



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In 1951, Celanese launched a chemical expansion program that includes enlarged research facilities at Clarkwood, Texas, a new petrochemical plant at Pampa, Texas, an additional production unit to the Bishop, Texas plant . . . a new affiliate plant in Canada. These additions will result in greatly expanded manufacturing facilities for the production of organic chemicals by the revolutionary Celanese oxidation method—using selected petroleum hydrocarbons for raw material.

With industrial activity at a high

level and the need for basic organic chemicals greater now than in the past, this program is designed to meet the growing needs of present accounts, and to give many other industries a new, dependable source of supply.

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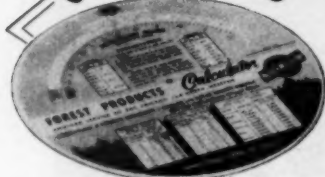
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Recorders vs. Bootleggers

Columbia Record Co., in the first major court action against illegal disc practices, has charged the makers of "Jolly Roger" records with pirating Columbia property.

Columbia Records, Inc., got together with jazz artist Louis Armstrong and went to the New York courts last week with a complaint against Paradox Industries, Inc. The charge: pirating of records.

According to Columbia, Paradox had put out six different Louis Armstrong jazz records—recorded entirely from records previously issued by Columbia. The trade name under which Paradox marketed the discs: "Jolly Roger."

• **First Big Action**—This marked the record industry's first major reaction to the bootlegging problem. No one has ever done much about it—mainly for two reasons:

• The bootleggers are almost impossible to catch.

• There are so many of them that each individual one does relatively little harm in comparison with the whole. Consequently, it's hardly worth the time and expense for a company to go after any of them. As one industry spokesman put it: "If we could round up the whole bunch of them and drag them into court under one suit, it would be fine. But we can't; we have to deal with them one by one."

• **The Methods**—Disc bootlegging falls into two main classifications: pirating and counterfeiting.

In pirating, the bootlegger makes copies of a record, then puts his own brand name on the copies and markets them as originals. This way, he can't be charged with trademark violations. He's violating the copyright law, but even here he's relatively safe: Generally, it's not the record company but the originator or publisher of the piece of music that holds the copyright. The originator or publisher is not likely to be wealthy and consequently is not likely to be interested in an expensive court action.

Columbia doesn't hold the copyright on the Louis Armstrong music. Its complaint against Paradox is charging only "wrongful taking of property" and "unfair competition."

In counterfeiting, the bootlegger copies not only the record but the label as well. Here, of course, he's open to a trademark suit. But still, he's not taking much of a chance: A counterfeiter usually stays in business only a few weeks before pulling up stakes. By the time the effects of his operations are felt, he's gone.

• **Fly-by-Night**—Gaiety Music Shop, off Times Square in New York City,

cites a typical instance of a counterfeiter at work:

Last December Columbia Records was paralyzed by a strike in its plant. As a result, very few records were delivered from the company to the music stores for several weeks. Johnny Ray's "Cry" was on the Hit Parade at the time; customers were howling for the record, but the stores just didn't have it. It was an ideal situation for a counterfeiter, and one of them seized the opportunity.

He walked into Gaiety and said he had several hundred "Cry" records outside in his car. Bernard Katz, owner of the store, had just finished talking to the Columbia distribution people, and they had told him there were absolutely none of the records to be had. Consequently, he was leery of the situation and did not buy any of the stranger's offering. But he did ask to see a sample. The label was a fairly obvious imitation of an Okeh (Columbia trade name) label. The stranger hasn't been seen since.

• **Widespread Trouble**—Columbia isn't by any means the only record company that's been having trouble with bootleggers. Almost every major company reports some difficulty. Capitol Records, Inc., says its Yma Sumac recordings were pirated under the brand name "Inca." Mercury Record Corp. ran into counterfeiters with one of its big-selling Patti Page discs. And RCA Victor came up with the classic story of them all:

Many record companies, RCA included, run a secondary business of making records for individual customers. The customer brings in a tape recording; the record company turns out as many discs as the customer wants. One day a man walked into RCA with a length of tape, had a large order of records made from it. Later, RCA found out that the tape was a recording of one of its own popular discs. The man had gone out and sold the records at a handsome profit.

• **Slow Motion**—Columbia's present complaint against Paradox is the first big court action to come out of the bootlegging trouble. About the only previous move of any importance was the recent suit brought by Columbia, Metropolitan Opera Assn., and American Broadcasting Co. against Wagner Nichols Recorder Corp.—the charge: that Wagner Nichols had illegally recorded Met broadcasts off the air.



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Our domestic customers have learned that large quantities of usable know-how are delivered with Ferro's products.

Also, we have exported that precious commodity to each of the locations on the map above. At each spot is a Ferro plant, making Ferro products under the Ferro engineering-plus-chemistry teamwork idea.

These plants provide products and services greatly needed locally. They add in turn to the experience Ferro brings to problems you bring to us.

You should get to know the Ferro team. It melds sound engineering practices with chemical ingenuity and imagination; it is the working principle by which we make major contributions to industrial finishing, to electrical heating, to many chemicals, to colors, to many allied fields. Our better-known areas of ceramics and porcelain enamels are the base from which frontiers in many directions are being explored and developed and perfected.

Could our engineering-plus-chemistry team help you? Ferro Corporation, Cleveland 5, Ohio.



**OUR FRONTIER IS ENGINEERING
TEAMED WITH CHEMISTRY...**



FINANCE

THE OPEN-END INVESTMENT TRUSTS: 1940-1951

Year	New Share Sales	Share Redemptions (Thousands of Dollars)	Net Sales	% Redemptions to New Share Sales	Total Net Assets (Thousands)	Number of Shareholders
1940.....	NA	NA	NA	NA	\$447,959	296,056
1941.....	\$53,312	\$45,024	\$8,288	84.4%	401,611	293,251
1942.....	73,140	25,440	47,700	34.7	486,850	312,609
1943.....	116,062	51,221	64,841	44.1	653,653	341,435
1944.....	169,228	70,815	98,413	41.8	882,191	421,675
1945.....	292,359	109,978	182,381	37.6	1,284,185	497,875
1946.....	370,353	143,612	226,741	38.8	1,311,108	580,221
1947.....	266,924	88,732	178,192	33.2	1,409,165	672,543
1948.....	273,787	127,171	146,616	46.5	1,505,762	722,118
1949.....	385,526	107,587	277,939	28.0	1,973,547	842,198
1950.....	518,811	280,728	238,083	54.1	2,530,563	938,651
1951.....	674,610	321,550	353,060	47.7	3,129,629	1,110,432
TOTALS..	\$3,194,112	\$1,371,858	\$1,822,254	*45.5%	**\$2,728,018	**817,181

*Yearly average of redemptions to new share sales. **Increase in 1941-51 period.

Super-Year for Open-End Funds

Simply colossal.

That's the way the open-end investment trust trade describes its 1951 operations. And no wonder. When last year ended the group could boast that:

- Sales of new shares had rocketed to a record high for the third consecutive year.

- Total assets, as well as the number of stockholders, had hit new peaks for the 10th straight year.

- Distributions to stockholders in 1951 were larger than ever before.

Here's the statistical picture of 1951 for 103 leading open-end funds, according to figures (above) made public last week by the National Assn. of Investment Companies:

- **New-share sales:** \$675-million, passing the \$600-million level for the first time. That's \$156-million—almost a third—higher than the 1950 peak. It is \$289-million greater than in 1949.

- **New assets:** Above the \$3-billion mark for the first time. Thanks to a record inflow of "new money," and to last year's upturn in stock prices, assets climbed above \$3.1-billion. That's \$600-million, or 25%, greater than the year before, twice the size of the open-end funds as recently as 1948.

- **Number of shareholders:** 1,110,432—That's 172,000, or 18%, more than at the close of 1950 (high-water mark until last year).

- **Dividends:** \$237-million, including \$108-million disbursed from profits on sales of security holdings. That's \$86-million—or 57%—more than 1950's payout, the previous high.

However, not everything was peaches and cream. Also at an all-time high—though not a boasting point—was the amount of stock turned in for redemption by holders. Some \$322-million worth of shares already outstanding were paid off in 1951. Thus, on the average, about 48¢ of each \$1 of new capital received had to be used to retire stock sold earlier. Only once before in the postwar years had a higher ratio been reported—in 1950, when redemptions approximated 54% of new-share sales. In the 1946-49 period, the redemption ratio averaged out at 36%.

- **Pros and Cons—**Managers of the investment funds have no apologies for last year's high redemption ratio. They contend that, when people have paper profits, a certain percentage always will want to turn them into cash.

Nevertheless, many Wall Street-

ers refuse to settle for so simple an answer. They maintain that investment funds are a fair-weather phenomenon—

(1) that their new-share sales swell when stock prices are rising and shrink when markets are diving; (2) that redemptions not only rise when people have profits, but that they also rise when people with losses decide to give up and go home; and (3) that dealers (who make their money on the sale of fund shares to individuals) create new sales and redemptions at one and the same time by "switching" customers.

There are long and sulfurous arguments on the second and third points. However, the debate is nebulous and technical, seems never to get anywhere. The arguments over the first point, on the other hand, are fairly clear:

- **Fund managers claim** they can sell new shares on a declining market just as well as on one that is rising. When everything looks dark, the public can be told, "Now is the time to pick up the bargains." And the funds are willing to stand on the record.

- **Commission merchants** (who argue for listed shares over the trusts because total charges on the buy-sell turnaround are so much lower) main-

sales presentation... or
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With a choice of four fast lenses and lamps up to 1000 watts, the Kodaslide Projector, Master Model, meets every projection requirement. To protect your valuable transparencies, a fan forces cool air to the lamp, to the condensing system, and to both sides of the slide. A handsomely covered carrying case, holding the projector, two lenses, spare lamp, slide carrier, and cord is available as an accessory. For further information or a demonstration of the Kodaslide Projector, Master Model, see your Kodak Audio-Visual dealer. Prices ranging from \$169 to \$246, depending on choice of lens. Eastman Kodak Company, Rochester 4, N. Y.

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21

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Kodak

This announcement is neither an offer to sell nor a solicitation of an offer to buy any of these Securities. The offer is made only by the applicable Prospectus.

The Dayton Power and Light Company

\$15,000,000 First Mortgage Bonds, 3 1/4% Series Due 1982

Dated February 1, 1952

Due February 1, 1982

Interest payable semi-annually February 1 and August 1 in New York City

Price 102 1/4% and Accrued Interest

256,007 Shares Common Stock
(\$7 Par Value)

Rights, evidenced by subscription warrants, to subscribe for these shares have been issued by the Company to its common stockholders, which rights will expire at 3 o'clock P.M. Eastern Standard Time on February 15, 1952, as more fully set forth in the Prospectus.

Subscription Price \$32 a Share

The several underwriters may offer shares of Common Stock at prices not less than the Subscription Price set forth above less, in the case of sales to dealers, the concession allowed to dealers, and not greater than either the last sale or current offering price on the New York Stock Exchange, whichever is greater, plus an amount equal to the commission of the Stock Exchange.

Copies of the applicable Prospectus may be obtained from only such of the underwriters as may legally offer these Securities in compliance with the securities laws of the respective States.

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January 29, 1952

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Atlas Corporation

33 Pine Street, New York 5, N. Y.

Dividend No. 41
on Common Stock

A regular quarterly dividend of 40¢ per share has been declared, payable March 21, 1952, to holders of record at the close of business on February 27, 1952 on the Common Stock of Atlas Corporation.

WALTER A. PETERSON, Treasurer
January 26, 1952.

KEEP "clues" in MIND WHEN LOOKING FOR:

- Employment
- Personnel
- Equipment
- Special Business Services

See the "clues" and Business Services Sections on page 150

For information on rates write:

BUSINESS WEEK

Classified Advertising Division 330 W. 42nd St.—New York 18, N. Y.

tain that the trust people just don't know adversity—that in the decade of their phenomenal growth they have never been up against really tough going. The bad spill after the 1942-46 bull market and the jolt when hostilities broke out in Korea, they maintain, hardly constituted trials by fire.

• **Divergences**—These arguments in generalities, however, overlook the differences between the various types of trusts. Open-end funds came in almost as many types as do securities of individual corporations—and are merchandised on their individual charms.

Some, for example, hold only common stocks, or bonds or preferreds exclusively. Others concentrate in the shares of a single industry; still others have constantly shifting holdings of bonds, preferreds, and commons. Thus at any given moment traders and investors will have different preferences for buys or redemptions.

Last year the heaviest redemptions were in the specialized trusts. Their sales of new shares rose only 8% above 1950; redemptions swallowed up virtually all of the new money they obtained.

New-share sales of the common stock funds, on the other hand, rose 48%, compared with their 29% advance the year before. And the redemption rate here was down to 43% from the 1950 figure of 51%.

Balanced funds held in a middle ground. New-share sales rose only 23% in 1951 (compared to a 41% jump the previous year), while redemptions held about the same ratio to new sales at 25%.

Individual performances of open-end funds were just about as varied as those of Big Board stocks.

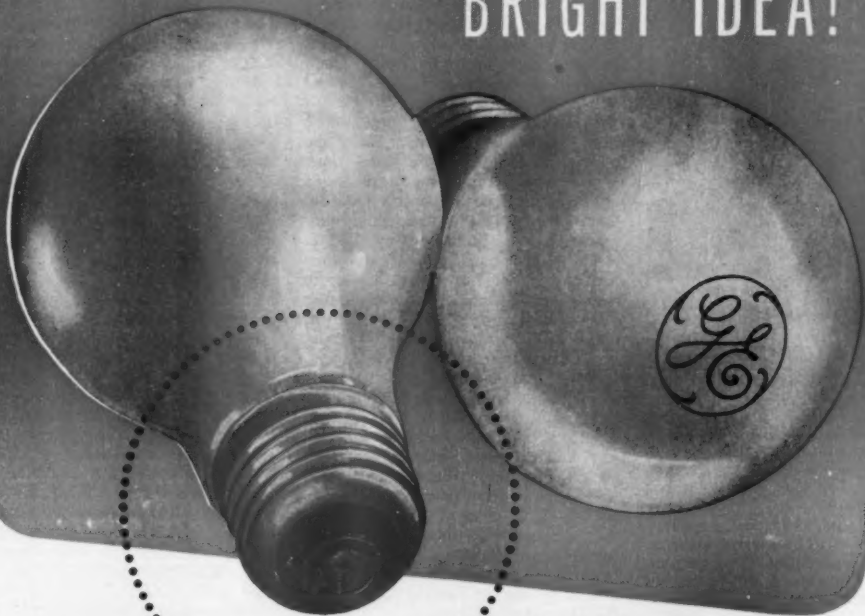
• **A Matter of Aims**—Investment results and dividends will differ from year to year according to varying objectives. One fund may aim at price stability and safety of capital. Another may shoot for long-term capital gains. Or a third may be interested in only speculative issues.

The investor is wise to pick the type that fits his needs. But, by the same token, he should be slow to compare results. Obviously, the investment results should be as varied as the aims.

• **Low Priced**—Last year funds specializing in low-price commons generally made much less favorable showings than in 1950. Funds interested only in investment-grade stocks, on the other hand, came close to equaling their 1950 results on both capital appreciation and dividends.

One speculative fund could boast (after taking "capital gains" dividends into consideration) of capital appreciation of only 11%, compared with 40% in 1950. Another gained 8% vs. 27% in 1950. One of the most "conservative" trusts, by contrast, could point to

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Theoretically, they said, it couldn't be done. Aluminum light bulb bases in brass sockets would corrode from galvanic action... but General Electric and Reynolds engineers working together proved the skeptics wrong! Under controlled laboratory tests, and in actual outdoor use, aluminum bases met all rigid requirements.

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Consider this demonstration of the advantages of aluminum when you are making plans for tomorrow's products. Remember, aluminum costs less today than before World War II... the only metal of which this is true.

Reynolds Aluminum Specialists are now working with many companies on their future designs. They will be glad to work with your designers to assure you of the maximum benefits of aluminum—low cost in the face of rising prices for other metals, light weight with strength, natural attractiveness, wide range of finishes, freedom from destructive rust, ease of fabrication.

Call the Reynolds office listed under "Aluminum" in your classified telephone directory. Or, write Reynolds Metals Company, 2586 South Third Street, Louisville 1, Kentucky.

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MODERN DESIGN HAS ALUMINUM IN MIND

(Advertisement)



Develops Business at British Industries Fair

"I found the BIF invaluable for seeing merchandise and developing contacts," said Mr. Simmonds, President of the Paper Corporation of the United States, upon his return from last year's BIF. "Some excellent business has developed through contacts made at the Fair, and I definitely plan to attend again this year."

British Industries Fair—London and Birmingham, May 5-16. For details, write or phone the nearest British Consulate, or; Commercial Department, British Embassy, Washington 5, D. C.

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Company**

**DIVIDEND
NOTICE**

The Board of Directors today declared a dividend of Twenty-five Cents (25c) per share on the Capital Stock, payable March 3, 1952, to stockholders of record Feb. 15, 1952.
C. N. Wesley
January 15, 1952 Treasurer

capital appreciation of 17% vs. 20% in 1950; a second of the same type had a rise of 15%, virtually the same as the year before.

• **Balanced Funds**—Similar variations marked the so-called balanced funds—those whose portfolios include bonds, preferreds, and commons. Their managements shift the proportion of such holdings in accordance with their views on the market.

However, not all managements move from "aggressive" securities into "defensive" holdings at the same time. Some that acted most cautiously ended up 1951 with capital appreciation of only 6% to 8%; others, more optimistic, were able to boast of up to 13%.

• **The Test**—Actually, there's only one real yardstick. That is your answer to this question: Could you have done as well yourself during 1951, for example, with the same investment objectives, under the same circumstances?

If you aren't a tyro and you think you could have done as well, then open-end funds are probably not for you. After all, their diversification and professional investment management isn't given "for free." Purchasers (unless they're big buyers) have to pay an average "loading charge" of 8% (which goes exclusively to those handling the distribution of such shares, not the trust itself) plus yearly operating costs averaging out at around 15% of a trust's investment income.

Equitable Life . . .

. . . tangles with state insurance examiners. Newspaper says nepotism is the root of the dispute.

Leslie Gould, financial editor of the New York Journal-American, has a Hearstman's eye for scandal. Last week Gould started a series of front-page articles confirming a rumor that had been going around the insurance business for months: that the Equitable Life Assurance Society and its president, Thomas I. Parkinson, were having difficulties with the New York state insurance department.

The Equitable is the third-largest life insurance company in the U. S. Its financial soundness is not questioned by the department. What is under criticism are fees and commissions paid to relatives and friends of Equitable officers and directors.

• **Boss' Son**—Storm center is the advertising agency of C. V. Parkinson Associates. This agency was set up in 1949 by Parkinson's son, Courtney V., then 23 years old. This firm placed Equitable advertising in newspapers and

magazines. On such deals, an agency customarily gets a 15% commission from the publication. This was no secret. C. V. Parkinson Associates is listed in the 1951-1952 Standard Advertising Register as one of two firms handling Equitable advertising.

Early last year, when representatives of state insurance commissioners began a routine triennial examination of the Equitable, they looked into this matter. It's understood they found the advertising contract with Parkinson Associates had been made without the official knowledge of the Equitable's board of directors. And Gould produced figures indicating that Equitable substantially increased advertising outlays, beginning in 1949.

Equitable's contract with Parkinson Associates has since been canceled. And the board is reported to have enacted a bylaw that no one related by blood or marriage to any officer or director shall, from now on, receive any compensation without the board's permission.

Gould estimated that Parkinson Associates placed \$1.5-million worth of advertising for Equitable. At 15%, its commission would be \$225,000.

• **Examiners**—Last week the Equitable got a preliminary draft of the examiners report, which apparently contains criticism of other fees and commissions that do not personally involve president Parkinson. Neither the Equitable nor the insurance department will comment on what is contained in the report. But the department says that "certain phases" of its examination of Equitable are being continued by former judge William F. Mertens, Jr., who has previously served as legal counsel for various state agencies.

Gould claims that the insurance department has been checking into:

• Legal fees paid by Equitable to a well-known New York law firm, which he claims also represented some companies that borrowed from Equitable.

• Fees paid to Equitable directors who, as lawyers, acted as counsel for the insurance company in special matters.

• The connection between a director and a business associate who, according to Gould, has received sizable fees from a construction company for securing construction contracts for about \$80-million from Equitable.

• Money (since refunded) received by several Equitable employees from McCarthy Oil & Gas Corp. while they were supervising its operations. This company got into trouble after borrowing about \$25-million from Equitable.

• Excessive expense accounts by out-of-town directors.

All that Equitable would say was that Gould's articles contained "insinuations and implications not substantiated by the facts."



The Conrad Hilton

AS FAMOUS AS MICHIGAN BOULEVARD... in Chicago

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THE PLAZA AND THE ROOSEVELT
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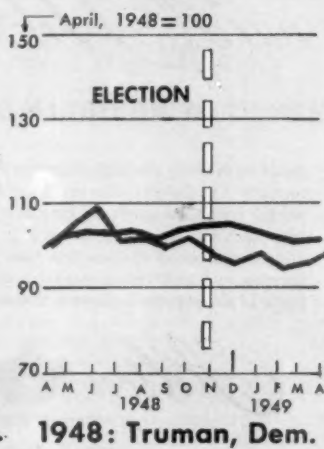
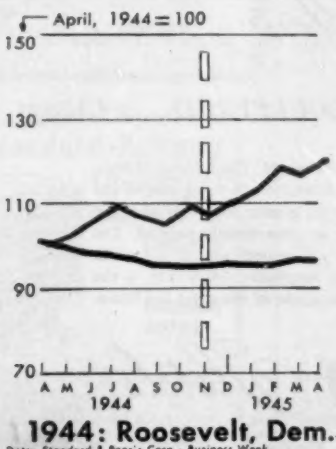
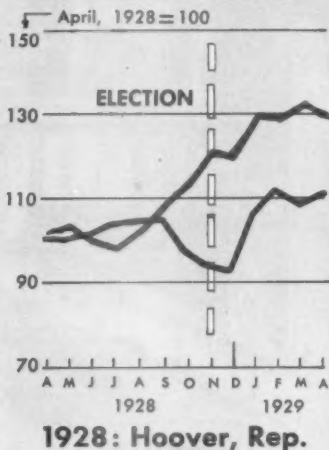
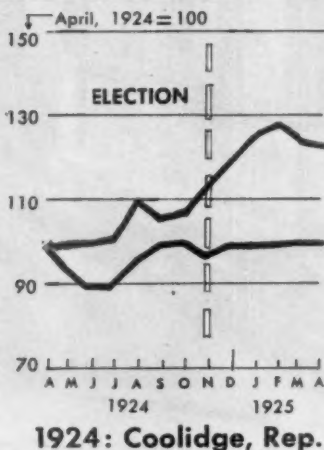
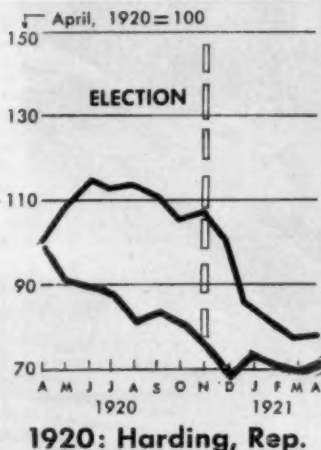
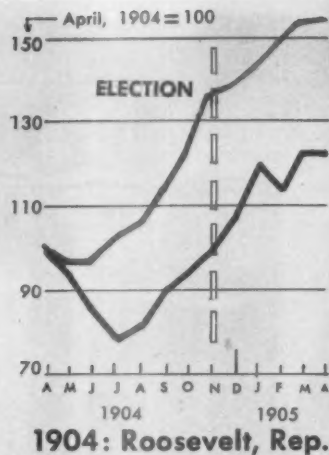
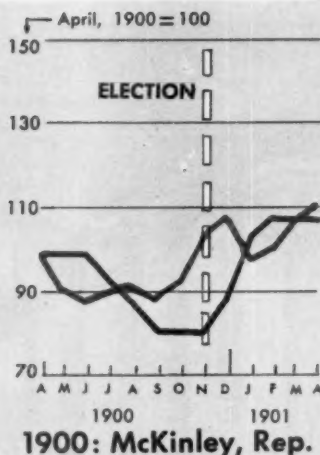
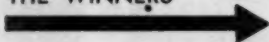


13 ELECTIONS: Here is what happened to

INDUSTRIAL STOCK AVERAGES —

BUSINESS ACTIVITY —

THESE WERE THE WINNERS



Data: Standard & Poor's Corp., Business Week.

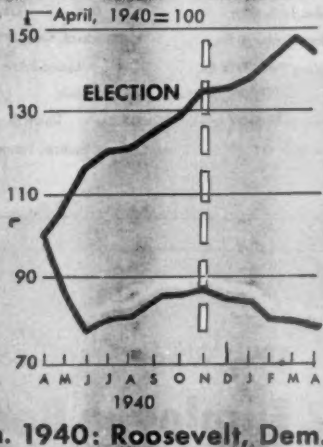
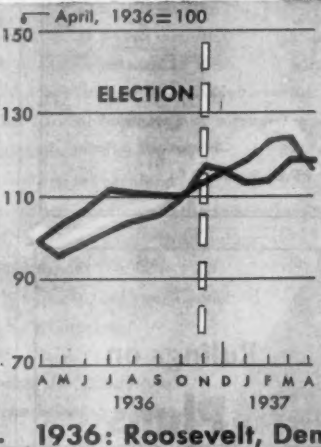
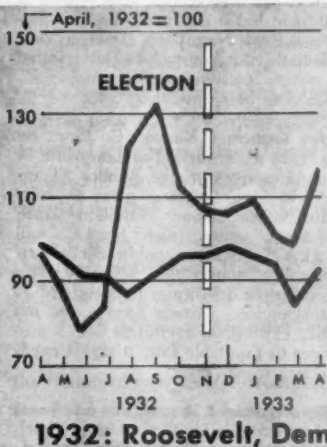
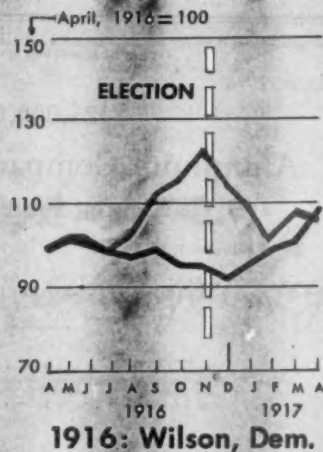
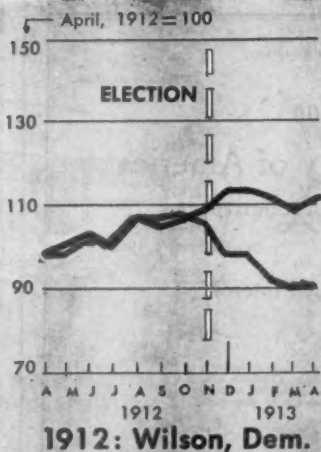
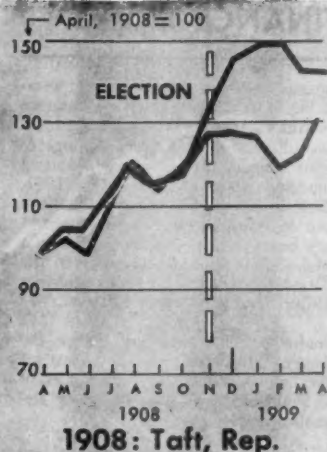
Election

In case you've been wondering, as most people have:

Presidential elections have an invigorating effect on both business activity and industrial stock prices—as a rule. Take these charts of a baker's dozen of elections. Both indexes usually were perched at higher levels (often much higher) six months after Election Day than six months before. Only occasionally has this not been so.

• **GOP Boosts**—Of course, effects on the upside have varied on each occasion, sometimes considerably. Much has depended on which party emerged the winner. Republican victories usually have provided greater impetus than Democratic triumphs.

Woodrow Wilson's Presidential vic-



They're Bullish Except . . .

stories in 1912 and 1916 had a far less favorable reaction on stock market prices and business activity than did the three preceding Republican triumphs. None of Franklin Delano Roosevelt's four victories provided so great a lift as the preceding two elections in which Republicans won. Nor did Harry S. Truman's surprise win in 1948.

• **Not Infallible**—However, you can't take everything on the charts at face value. War and depression distorted the results of a number of Democratic victories. Some Republican triumphs have occurred in bad times (the 1920 election, for example, produced none of the upswing that usually accompanies GOP triumphs). Others have occurred in boom times (1924 and 1928), when

there probably would have been upswings no matter who won.

Keep in mind, too, that good and bad election year indexes have, in the final analysis, proved mighty poor indicators of things to come still later. Despite the effervescence that followed Herbert Hoover's 1928 victory, both the stock market and business activity a year later started their worst nosedive in history. The unfavorable chart reaction to Truman's 1948 win upset the crystal ball readers similarly. Soon after his election business earnings began booming as never before. By mid-1949 the stock market had started a rise that has since sent the Dow-Jones industrial stock average zooming over 100 points.

Where 1952 election results are concerned, Wall Street isn't worrying too much about one indicator: It expects continued high business activity no matter who wins, due to the defense program.

There's no such unanimity in the Street regarding stock market prices.

Nor will the choosing of the party standard bearers chase all the clouds away. Wall Street is concerned about earnings, dividends, and the amount of retained earnings. The course of international relations, the rate of arms spending, and the state of the federal budget will still be in doubt; the decisions made by the two major parties in Chicago can provide no more than partial answers to the uncertainties.

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January 30, 1952

\$125,000,000

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Due February 1, 1964

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FINANCE BRIEFS

Savings and loan associations are overtaking mutual savings banks in the race for thrift money (BW—Feb. 25, p110). According to the National Savings & Loan League, total shares outstanding increased about \$2-billion in 1951, reaching about \$16-billion. That's a gain of around 14%. Deposits in savings banks increased \$876-million to a total of \$20.9-billion, according to the National Assn. of Mutual Savings Banks. That's only a 4.4% gain.

Trading on the New York Stock Exchange last month was the smallest for any January since 1949. But sales of 37.1-million shares were ahead of December and November.

A merger with Bank of Manhattan still seems like a good idea, says Winthrop Aldrich, board chairman of Chase National Bank, New York. Observers conclude that legal obstacles which stymied a merger last summer (BW—Aug. 25, p24) can be cleared away.

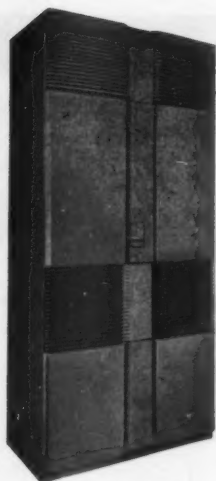
New financings: Koppers Co., Inc., expects to sell about \$11-million worth of common stock to the public. Trans World Airlines, Inc., plans to offer stockholders about \$5-million worth of new common. Inland Steel Co. will seek \$25-million on public sale of first mortgage bonds plus \$25-million on convertible debentures to be offered to stockholders. Armco Steel Corp. has sold \$25-million of 10-year 3% debentures to Equitable Life; it says it needs money to pay taxes.

Pennsylvania R.R. will finance most of its latest \$60-million order of diesels and freight cars through 15-year conditional sales contracts to banks and insurance companies. No more than \$10-million worth of equipment trust certificates will be sold to the public.

New revenue angle: Chattanooga, Tenn., will finance a sewage disposal program through revenue bonds payable from charges added to water bills of a private water company. The company will collect these fees for the city and cut off water if fees aren't paid.

Higher yields: Connecticut General Life Insurance Co. earned 3.85% on new investments during 1951, compared to 3.62% in 1950. The company recently lowered premiums, particularly on oldsters (BW—Dec. 29, p84).

Long Island R.R. has paid out \$6.7-million to settle claims from its two 1950 wrecks (BW—Sep. 15, p152). Of 900 claims, 150 are still unsettled.



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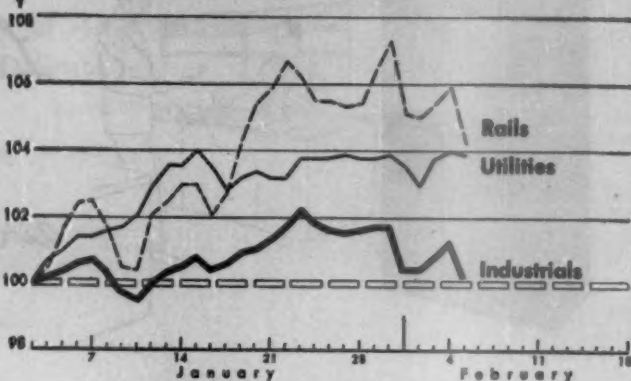
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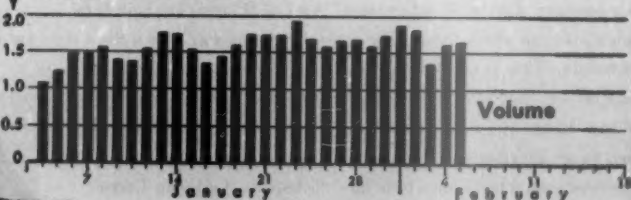
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THE MARKETS

Dow-Jones Averages (Dec. 31, 1951=100)



Millions of Shares



Yearend Rally Slips a Notch

The yearend rally in the stock market has run into trouble (chart). That was to be expected. There were definite signs of weakness before the actual break came.

One of them, of course, was the languid trading in recent weeks (page 128). Not since late October has the volume of shares traded on the New York Stock Exchange gone so high as 2-million shares.

Another bad symptom was the narrowness of the rally. On a good many days, the number of issues that declined was greater than the number of issues that advanced (BW—Jan. 19'52, p153).

• **Too Far Ahead**—Furthermore, the stock market had been running ahead of business prospects in general. While in late January the Dow-Jones industrial and rail averages moved close to their bull market highs of 1951, there was no corresponding upsurge in prospect for business in the immediate future.

In the next couple of months the Treasury expects to take out of the economy in taxes a good many billion dollars more than it spends. Also, consumers are hanging on to their savings. Some consumer industries, like textiles and floor coverings, aren't doing very well. Lately, there has been some weakness in commodity prices (page 9).

• **Different Impact**—The market break has had varying effects on the three Dow-Jones averages. Since the start of the year the speculative rail stocks have advanced the fastest. Traders and investors have been attracted by reports of higher-than-expected earnings and—in the case of Canadian Pacific and Northern Pacific—by oil possibilities. Then, when the market ran into trouble, the rails dropped faster than the other two groups. But the rail average is still about 4% higher than it was at the beginning of 1952.

That's not true of the industrial average, which wound up right where it was when the year ended. But the

More Per Man-Hour

CHEMICAL PROBLEM...

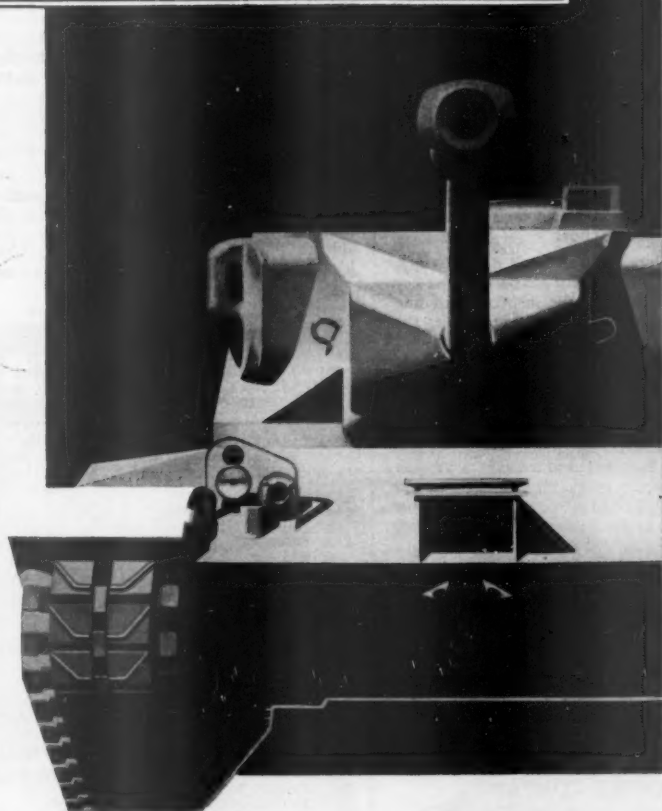
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utilities moved higher, then held nearly all their gains. They offer better yields than many industrials and rail shares. And they usually suffer least in any deflation.

• **Leeway**—But the drop in the industrial and rail averages probably doesn't mean that the market has run into a real air pocket. Analysts figure that there is plenty of buying support for the industrials between where they are now (around 269 at midweek) and the 250 level.

People are still interested in growth situations. This continued interest is shown by the successful offering this week of 400,000 new shares of Monsanto Chemical Co. at a price that is very close to present market value. Dividend yield on this stock is only approximately 2.5%.

Speculative issues, too, have appeal. Common stock of St. Regis Paper Co. has moved up on heavy trading recently, on hopes it may prove to have valuable oil holdings.

Bond Market Shows Firmer Tone

Corporate bonds generally have been acting better lately than stocks. That goes for both the new issues and secondary (trading) markets. Bond prices have been showing a persistent uptrend while most equities have been disappointing.

True, the dimensions of the rise are not yet striking. The encouraging thing is the trend. As the sampling (below) indicates, many issues lately have been able to whittle down last year's sharp losses.

Many of Wall Street's bond experts, however, are cautioning clients against trying to hop on the bandwagon at this late date. As they see it, much of the recent price improvement can be attributed to a temporary factor: the reinvestment demand that usually makes itself felt at this time of year. Such buying, they say, will soon dwindle. Another stumbling block in sight for the rally will be the competition of the sharply higher volume of new issues offered to investors.

Moody Rating		Losses Since					
		1950 Year-end	1950 Year-end	At Low	Now		
AA	American Tel. & Tel. 2½s, 1986.....	96.25	96.50	86.62	90.50	10.0%	6.0%
AAA	Atch., Top. & S.P. 4s, 1995.....	128.12	129.87	116.25	119.37	9.3	6.8
A	Bethlehem Steel 3s, 1979.....	104.00	104.50	97.75	99.00	6.0	4.8
A	Brown Shoe Co. 3½s, 1971.....	First offered at 100 June 1951		104.00			+4.0f
A	Carolina Pow. & Lt. 2½s, 1981.....	First offered @ 101¼ Feb. 1951		*93.00			8.0f
BAA	Calumet Corp. 3s, 1965.....	102.75	103.75	97.50	99.75	5.1	2.9
AA	Chesapeake & Ohio 3½s, 1996.....	104.50	104.75	96.12	99.37	8.0	4.9
AAA	Commonwealth Ed. 2½s, 2001.....	First offered @ 101.33 Jan. 1951		93.25			8.0f
AA	Consumer Power 3½s, 1981.....	First offered @ 101.47 Mar. 1951		*100.00			1.0f
AA	Consolidated Edison 2½s, 1982.....	101.50	101.50	91.25	95.50	10.1	5.9
BAA	Crucible Steel 3½s, 1966.....	99.25	99.75	95.00	*95.25	4.3	4.0
AA	Detroit Edison 3s, 1970.....	105.25	105.50	98.00	101.25	6.9	3.8
AAA	Duke Power 3½s, 1981.....	First offered @ 101.93 Apr. 1951		*104.00			+2.0f
B	Erie R. R. Income 4½s, 2015.....	81.87	82.75	70.12	72.75	14.4%	11.0
AA	General Foods 3½s, 1976.....	First offered @ 100 June 1951		104.50			+4.5f
A	Georgia Power 3½s, 1981.....	First offered @ 101.87 Jun. 1951		*105.50			+3.6f
A	B. F. Goodrich 2½s, 1965.....	101.25	101.75	95.25	98.50	5.9	2.7
A	Great Northern 2½s, 1982.....	96.00	96.00	80.00	85.00	16.7	11.5
B	Gulf, Mobile Income 5s, 2015.....	87.00	88.37	77.50	80.25	10.9	7.8
BAA	Lehigh Coal & Nav. 3½s, 1970.....	96.00	97.00	89.00	91.00	7.3	5.2
BAA	Mead Corp. 3s, 1966.....	101.50	102.75	97.50	*99.25	4.9	3.2
A	Minnesota Pow. & Lt. 3½s, 1981.....	First offered @ 101.75 Jul. 1951		*104.25			+2.5f
AA	New England Power 2½s, 1981.....	First offered @ 102.13 Feb. 1951		*97.00			4.0f
B	New York Central 4½s, 2013.....	77.50	79.25	61.50	69.75	20.6	10.0
AAA	Norfolk & Western 4s, 1996.....	128.00	132.00	117.75	120.00	8.0	6.2
AA	Pacific G. & E. 3s, 1971.....	104.00	105.00	97.62	99.75	6.1	4.1
BAA	Penna. R. R. 4½s, 1984.....	103.50	107.75	87.75	92.00	15.2	11.1
AA	Shell Union Oil 2½s, 1971.....	97.62	98.25	90.75	94.75	7.0	2.9
AA	So. Cal. Edison 2½s, 1976.....	First offered @ 101.34 Feb. 1951		*97.00			4.3f
BA	Southern Pacific 4½s, 1981.....	100.37	102.25	90.50	95.75	9.8	4.6
AAA	Standard Oil (N. J.) 2½s, 1971:.....	96.75	96.75	89.75	94.37	7.2	2.5
BAA	Tenn. Gas Trans. 4½s, 1971.....	First offered @ 102.25 Dec. 1951		*104.62			+2.3f
AAA	Union Pacific 2½s, 1991.....	96.25	96.75	84.00	90.00	12.7	6.5
BAA	U. S. Rubber 2½s, 1976.....	98.00	98.37	89.75	90.00	8.4	8.2
AA	Virginia Electric 2½s, 1975.....	101.00	101.75	92.00	96.12	8.9	4.8
AA	Virginian Ry. 3s, 1993.....	99.37	100.50	92.50	95.50	6.9	3.9
AA	Westinghouse Elec. 2½s, 1971.....	101.00	101.37	92.75	95.50	8.2	5.4
DOW-JONES BOND AVERAGES							
	Higher-grade rails.....	107.53	109.05	97.33	100.26	9.5	6.8
	Second-grade rails.....	98.40	99.33	93.45	95.82	5.0	2.6
	Utilities.....	103.94	104.00	97.06	99.49	6.6	4.3
	Industrials:.....	101.68	102.00	97.37	98.90	4.2	2.7

N.B. All prices given are in percent of par.

* Bid price. f Comparison with offering price.

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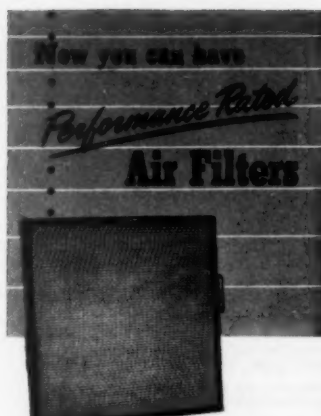
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The mobilization pinch on raw materials is forcing home appliance makers to redesign most of their products. It's an industry decision, but the manufacturers don't have much choice.

• **Down to Brass Tacks**—They've gone about as far as they can in cutting use of critical materials by the easy production switches—doing away with gadgets and trim, substituting more available materials for critical metals in parts and surface features. But mobilization officials have warned the industry that it will get less copper and nickel as military demands rise this year—and probably through 1953. Aluminum will get tighter, too, though there may be more next year for consumer goods.

Appliance makers have done pretty well with dwindling metal supplies so far. Despite government reduction of more than 50% in their steel, copper, and aluminum supplies, they've kept appliance output at an average of about 75% of pre-Korea rates. Industry people figure this rate is at least equal to current consumer demand for most appliances—but demand, light since the late 1950 scare-buying wave, may pick up this year.

• **Two-Way Stretch**—In addition to redesigning, manufacturers are now talking of stretching scarce metals by cutting the number of models, especially of major items like ranges, refrigerators, and washers. That saves metal in two ways: (1) It's technically more economical to channel all your metal into a few basic lines; and (2) you can cut out all or most of the de luxe models, which chew up more metal than less expensive lines.

• **Nickel Squeeze**—The nickel situation points up the present predicament of much of the appliance industry. Nickel is needed in increasing quantities for jet aircraft and ordnance because of its heat-resistant and hardening qualities. Appliance makers have made drastic cuts in their use of it—to 43% of pre-Korea consumption for electric ranges, to 45% for washers, and to 35% for refrigerators.

One company reduced its nickel use by 90 lb. per 1,000 refrigerators by using chrome steel instead of nickel stainless for shelves and other exposed parts. Another refrigerator maker went even further, saving 149 lb. per 1,000 units

by using enameled steel and chrome, and eliminating all nickel-plated and stainless parts.

Savings by electric range makers amount to 1.43 lb. per range—but they're nearing the end of their rope. There's no substitute for nickel in range heating units, as well as for heating elements in dryers, ironers, and other products.

• **Copper Problems**—There's been almost as much conservation of copper, which is just slightly less scarce than nickel and about as essential for appliances. One producer of electric ranges rewired all his lines to save copper wire. Another redesigned valves and fittings to save from 18% to 50% of the brass used for each. Producers of all major lines have reduced the thickness of sheet copper—and aluminum and steel, too. A refrigerator maker saved 3,500 lb. of copper per 1,000 units by cutting sheet thicknesses and eliminating some copper entirely from other parts.

• **Aluminum Hope**—At the moment, aluminum is about as tight as copper and nickel. But new aluminum plants now being built will increase the supply in a year or so. And so appliance makers are experimenting with it as a future substitute for copper in most electric conductor components. Meanwhile, they've made considerable savings through substitutions.

A manufacturer of home washers, for example, reduced his aluminum use last year by 150,000 lb. by using cast iron instead of aluminum die castings for motor end bells. Another saved 400,000 lb. by using plastic instead of aluminum agitators. Most washer makers have substituted enameled steel for aluminum sheet in many parts.

• **Hobson's Choice**—There's a limit to the amount of critical material you can take out of appliances by this kind of substitution and by simplification of parts and attachments. The next step is to design substitute materials into an entire product, to make those parts that still must consume critical metal more efficient.

Consumers probably won't notice much outward change in the appearance of redesigned appliances. The manufacturers insist that their engineers still have a lot of tricks up their sleeves.

12 QUESTIONS MOST OFTEN ASKED BY TOP MANAGEMENT

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CHECKLIST: Defense Regulations

The following listing and condensed description cover all the materials and price-control regulations issued by the defense agencies during the preceding week.

Full texts of the materials orders may be obtained from National Production Authority, Washington 25, or from any Dept. of Commerce regional office.

Full texts of the price orders may be had from the Office of Price Stabilization, Washington 25, or from the regional OPS office in your area.

Materials Orders

Non-nickel-bearing stainless steel: Removes this metal from CMP control so that consumers no longer have to obtain CMP-4B "tickets" to purchase it. Production will remain under control of the Melt Schedule Order M-80 and under the basic steel order M-1. The 45-day inventory limitation remains in effect. The amount of the metal a person may obtain during a quarter by self-certification of orders is reduced to 500 lb. CMP Reg. 1, Dir. 9; CMP Reg. 1, Dir. 1 amended (Jan. 28).

Iron and steel scrap: Deletes the reference to auto wreckers now contained in the definition of scrap dealers since Order M-92 limiting inventories of auto wreckers contains the same basic provisions. Also requires any scrap dealer who buys, sells, or delivers 100 gross tons or more of scrap during the preceding month to report such movement to NPA. M-20 as amended (Jan. 20).

Iron and steel: Revokes certain amendments that are either obsolete or incorporated in an amending order and revises the basic steel order to conform with the operations of CMP. M-1 amended; Dir. 1, 2, 3, 4 revoked (Feb. 1).

Lighting fixtures: Limits the use of copper in the manufacture of four types of electric lighting fixtures to specific functional parts. M-97 (Feb. 4).

Pricing Orders

Fats and oils: Terminates the applicability of fats and oils ceiling price regulation to sales in the territories and possessions of the U. S. CPR 6, Admt. 12 (eff. Jan. 29).

Distilled spirits: Eliminates the provision requiring OPS to announce a monthly factor for sellers of domestic bulk whiskey to use in adjusting ceilings. In the future, when necessary,

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The best time to buy tire chains is before the next snow fall. Make sure there is a set of Campbell Lug-Reinforced Tire Chains for every vehicle used in your business.

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Chain for every need... industrial... marine... farm... automotive



OPS will issue an amendment permitting distillers to make price adjustments. Also provides for retailers who wish to determine ceiling prices for a category of products to do so on the basis of their operating expenses during the months of November and December, 1951. CPR 78, Amdt. 3; CPR 78, SR 1, Amdt. 2 and CPR 78, SR 2, Amdt. 3 (eff. Jan. 29).

Cobalt chemicals: Permits manufacturers to adjust their ceilings to reflect the recent increase in cobalt. CPR 22, SR 7, Amdt. 4 (eff. Jan. 24).

Rubber products: Permits manufacturers of certain rubber products to apply for ceiling price adjustments where ceilings are abnormally low because prices were out of line during the designated base period. CPR 22, SR 8, Amdt. 5 (eff. Jan. 24).

Ice: Permits distributors, manufacturers, and harvesters of ice to apply for adjustments in their ceiling prices. GCPR, SR 45, Rev. 1 (eff. Jan. 30).

Hudson passenger cars: Sets basic retail dollars-and-cents prices for 1952 Hudson passenger automobiles, and for factory-installed extra, special, or optional equipment. CPR 83, Sec. 2, Spec. Order 12 (eff. Jan. 24).

Used passenger automobiles: Revises the dollars-and-cents ceilings for used passenger automobiles, correcting certain errors and adding several models and makes omitted in the original schedule. CPR 94, Amdt. 2 (eff. Jan. 30).

Industrial diamonds: Clarifies term "industrial diamonds" to mean that both diamond bort and diamond powder are included. CPR 30, Amdt. 31 (eff. Feb. 2).

General Motors cars: Sets up increased basic retail dollars-and-cents prices for 1952 models of GM passenger automobiles and for factory-installed extra, special, or optional equipment. CPR 83, Sec. 2, Spec. Order 11 (eff. Jan. 24).

Glass prescription ware: Permits manufacturers of glass prescription ware that have not raised their prices since June 24, 1950, to adjust ceilings to bring them in line with prevailing industry prices. GCPR, SR 88 (eff. Feb. 2).

Printed products and printing services: Sets up tailored regulation providing for pricing of certain products printed on paper, paperboard, cellophane, paperback foil, and flexible film packaging material, and printing services connected therewith. CPR 121 (eff. Feb. 4).

Western softwood plywood and veneer: Sets up dollars-and-cents ceilings on direct mill sales of standard grades and dimensions of softwood plywood and Douglas fir veneer produced west of the Rocky Mountains and provides means for pricing special items

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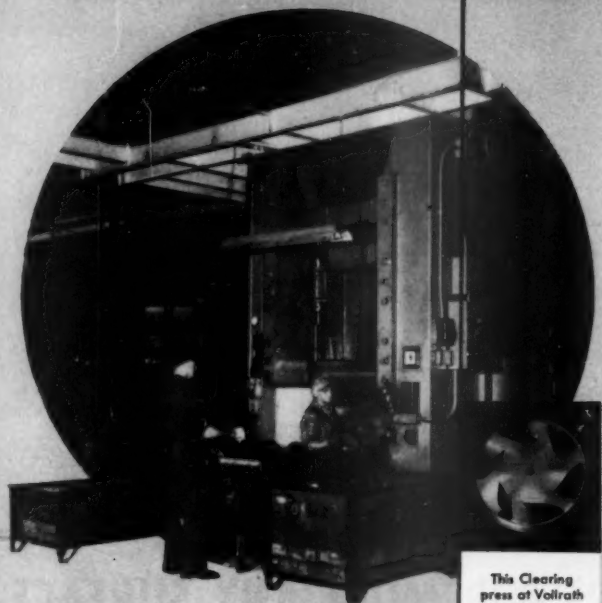
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THE WAY TO EFFICIENT MASS PRODUCTION

This Clearing press of Vollrath is making fly-wheel fans for lawn-mower engines.



manufactured in that area. CPR 122 (eff. Feb. 4).

Ford passenger automobiles: Sets up increased basic retail dollars-and-cents prices for 1952 models of Ford Motor Co. passenger automobiles and for factory-installed extra, special, or optional equipment. CPR 83; Sec. 2, Spec. Order 13 (eff. Jan. 29).

Consumer durables: Exempts from price control certain commodities considered unimportant in their effect on national economy such as advertising novelties, art glass products, and geographical or preserved biological material. GOR 5, Amdt. 4 (eff. Feb. 4).

Beef freight rates in Southeast: Authorizes slaughterers and wholesalers of beef whose distribution points are located in the southeastern states to use old freight rates in effect before Nov. 8, 1951, in computing ceiling prices for certain grades of beef. CPR 24, Amdt. 8 (eff. Feb. 5).

Arkansas cigarettes: Revokes regulation authorizing wholesale and retail sellers of cigarettes in Arkansas to increase ceilings to comply with Arkansas' minimum markup statute. GCPR, SR 53 Revocation (eff. Mar. 1).

Iron and steel scrap: Modifies regulation by eliminating premium grade 30 hard steel cut 2 ft. and under and by easing the restriction with respect to charging premiums established for grades 11 through 18 and grades 20 and 21. CPR 5, Amdt. 7 (eff. Feb. 5).

Custom plastics: Makes certain additions and minor alterations to the pricing method for custom-molded and custom-fabricated plastic products. CPR 22, SR 14, Rev. 1 (eff. Mar. 15).

Canned pumpkin and squash: Gives canners of pumpkin and squash the option of using November selling prices as their ceiling prices. CPR 55, SR 6, Amdt. 1 (eff. retroactively to Nov. 28, 1951).

Retail pork: Changes from Friday to Thursday the optional date for retailers of pork products to compute their seven-day wholesale costs of pork on which they base retail ceilings. GCPR, SR 65, Amdt. 1 (eff. Feb. 6).

The Pictures

Cover—Dick Wolters
Jay-Bee—80 (bot.), 81 (bot.)
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Newman-Schmidt Studios—50
Press Pictures Service—30
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Trinity Court Studio—70
Wide World—23, 40
Dick Wolters—58, 59, 72



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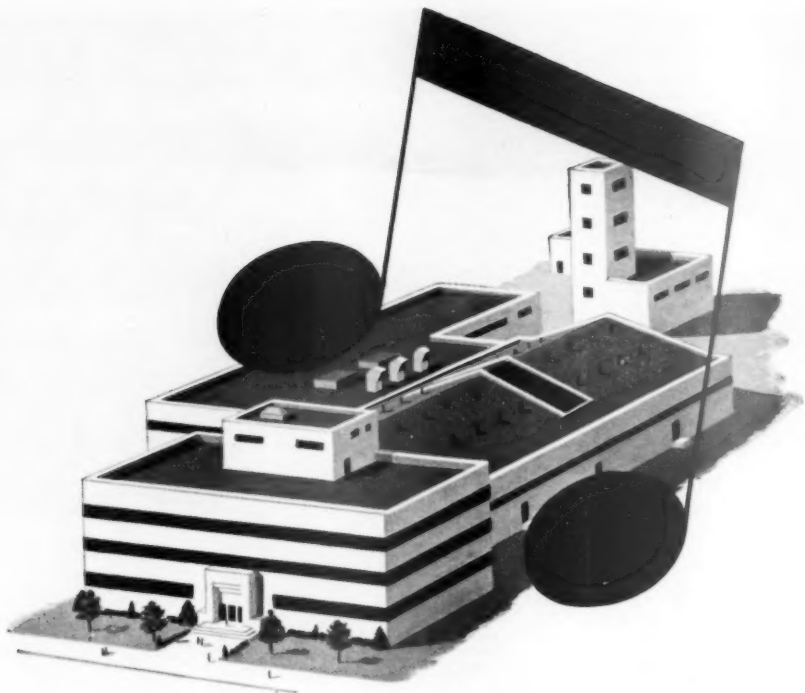
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The Southern Serves the South

INTERNATIONAL OUTLOOK

BUSINESS WEEK
FEBRUARY 9, 1952

A
BUSINESS
WEEK
SERVICE

Despite French-German squabbling over the Saar, U. S. officials haven't given up hope of a European army with some German divisions in it.

There's no doubt, though, that the row has upset Washington's timetable. German membership in the European army was due to be settled at the North Atlantic Treaty Organization meeting this month. Now the question may be up in the air for months.

This won't affect Eisenhower's plans for a 30- to 40-division army in Europe by yearend. German participation in this short-term force never was in the cards. But it will stretch out the medium-term program.

The French government is playing a double game in the Saar. It knew the risk it was taking when it appointed an ambassador to that area.

- Foreign Minister Schuman appointed Grandval, a French rightist, to appease right-wing elements in the French Assembly. In this way he hoped to gain their support for the European army when it comes before the legislators.

- Paris is anxious to get the Saar steel industry in French hands before the Schuman Plan starts operating. This will give France more bargaining weight in the coal-steel pool. (The Saar coal mines are run by the local administration, which is dominated by the French.)

This week Chancellor Adenauer tried to calm things down a bit. He really doesn't want elections in the Saar—at least not now. He knows that the Saarlanders might vote against joining West Germany.

But Adenauer will continue to talk up the Saar issue until France agrees to some kind of German membership in NATO.

Adenauer has a tricky problem—keeping the German nationalists quiet without completely alienating the French.

Keep your eye on Britain during the next few months. You'll see the Churchill government make a desperate effort to regain solvency for Britain and the sterling area.

Part of the Churchill program is in effect now—a tight money policy, drastic import cuts, a ban on most capital investment (to free capital goods for export).

Already business is being pinched badly. And signs of unemployment are showing up.

But Chancellor Butler's budget next month will carry the program a step further. Government spending must be cut. And taxes may be raised. Moves like these are sure to be politically unpopular.

The Labor Party already is saying that the Conservatives have created a phony crisis. The brickbats will fly faster when Churchill's economic wringer squeezes still tighter.

There's one thing, though, that may soften the political warfare—the death of King George VI and the accession of Queen Elizabeth. This may help Churchill in getting national unity for a while. Labor moderates, such as Attlee, don't take such an event lightly.

Chancellor Butler's policies have made new money really expensive in the London capital market. Big British corporations now have to pay rates that are fantastic compared to a year ago.

Take Imperial Chemical Industries. It is now selling a £20-million com-

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK
FEBRUARY 9, 1952

mon stock issue on which the dividend yield is 6%. On top of that, ICI must pay a 50% dividend tax, which makes the real cost of new money 9%.

By contrast, Britain's nationalized industries still can borrow long-term money from the Treasury for about 3½%. British businessmen think this is unfair.

Fairly serious unemployment is likely in Britain over the next few months.

British industry is now dropping workers left and right. This is due partly to the slump in soft goods. In the metalworking industries, layoffs result from the steel shortage.

So far rearmament isn't taking up the slack. Armament plants are still tooling up. So they won't need any extra labor until fall.

Chile is getting set to step into the world newsprint picture. Two projects—one approved, the other pending—may make exports of the precious commodity possible by 1955.

- Private U. S. investors, headed by Pacific Industries Development Corp., have the green light from Chile to build a \$10-million plant with a capacity of 50,000 tons a year.

- A Chilean firm hopes to put up a mill with a capacity of 40,000 tons. But this hinges on getting a loan from the World Bank.

Meantime, other newsprint-starved nations are trying to use substitutes. Argentina has begun producing some newsprint from a mixture of wheat straw, linseed straw, and sugar cane waste.

President Peron has nipped another assassination plot in the bud—or so he says. But what really threatens him is the Argentine economic crisis.

At home, the trouble shows up in a meat shortage, failure of the wheat crop, and a race between wages and prices.

The foreign trade outlook is equally grim. Exports can barely hit \$800-million this year; bedrock import needs are at least \$1-billion. And present net reserves are hardly enough to make up the difference.

Washington has high hopes for a peaceful settlement with Brazil in the dispute over foreign investors' remittances (BW-Jan. 12 '52, p150). The problem is being tackled through informal meetings between Brazilians and U. S. and British investors.

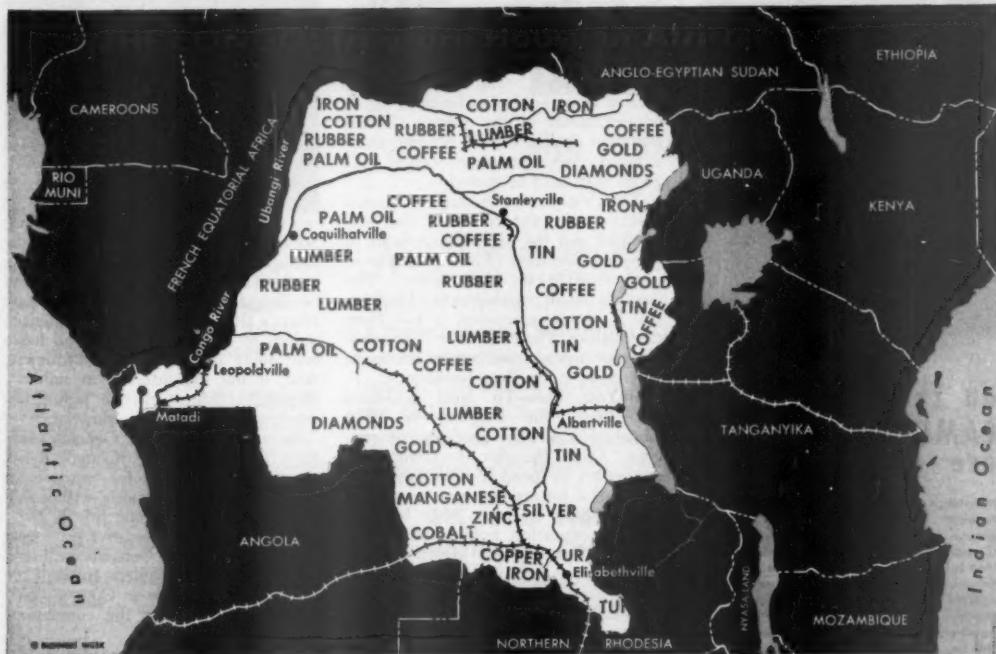
A formal U. S. government protest isn't likely—unless the conferences bog down hopelessly.

Actually, the State Dept. would settle for a lot less than U. S. investors. State feels that profits and capital sent home from Brazil have put a heavy strain on Brazilian reserves. State would accept rules that restrict remittances, provided they're temporary and not punitive.

One idea that's been tossed around in Washington: a priority system in Brazil for remittances. Utilities, manufacturers, and importers of essential materials would get the best break; producers of "nonessential" consumer goods would bring up the rear.

But the most likely prospect still is a multiple exchange rate, with capital transactions on a free money market. That would let everybody off the hook.

BUSINESS ABROAD



Atomic Age Closes In on the Jungle

Most of Western Europe's colonial powers, especially Britain and France, are on a three-front defensive these days—against communism, against native nationalism, and against U. S. criticism. Not so Belgium, which owns the potentially richest colony left in the world—the Belgian Congo.

Today this huge equatorial colony (into which you could fit 76 Belgiums) is developing its rich resources at break-neck speed, unhampered by the threat of Communist infiltration or by native demands for self-government. It is one of the few spots in the world where private capital is top dog, though under a peculiar paternalistic capitalism.

The Congo is one colony that seems to have a future—as a colony. A lot of people rate it as a model of colonial administration; that's a far cry from 50 years ago when Leopold II of Belgium was labeled in the U. S. as the worst of the imperialists.

I. War-Born Prosperity

The Congo's present security and stability are a godsend not just to Belgium but to all the countries of the

Atlantic Alliance. For the Congo is the West's chief source of uranium, cobalt, and industrial diamonds. Also, it's one of the biggest suppliers of copper, tin, zinc, and manganese.

World War II set off the Congo's industrial boom, made outsiders realize that the colony was more than a steaming jungle where tom-toms sounded along the banks of Africa's most majestic river.

Western rearmament since Korea has given the Congo its second impetus. You can see this in the expansion of the colony's export trade. In 1950 Congo exports totaled \$333-million. Preliminary estimates put 1951 sales abroad at about \$500-million, a 50% increase.

• **Metals Unlimited**—Output of the Congo's strategic metals is at new peaks. Last year the colony produced about 6,000 tons of cobalt (80% of the world total), 10-million carats of industrial diamonds (70% of world output), 190,000 tons of copper, 80,000 tons of zinc, and 15,000 tons of tin. Manganese mining, which began only a year ago, is scheduled to reach a 100,000-ton-a-year level during 1952.

Even production at these rates barely taps the mineral wealth of the colony, which is concentrated in Katanga province, a plateau area that borders on Northern Rhodesia. Congo reserves of cobalt are the largest in the world; proved reserves of high-grade copper are put at 30-million tons; and tin ore reserves amount to at least 180,000 tons.

In addition, the Congo is an important producer of such rare minerals as lithium, cadmium, tantalite, columbite, and tungsten.

Besides the ore deposits now being exploited, the Congo has undeveloped beds of iron ore that are said to total several-hundred-million tons. And there's evidence of important oil fields in the central and eastern part of the country.

• **Farm Produce**—Agricultural development has almost kept pace with mining in the past seven years, despite some serious problems such as soil erosion caused by tropical rainfalls. Palm oil, cotton, coffee, rubber, and lumber account for nearly half of the colony's exports. Last year the Congo produced about 240,000 tons of palm oil, 50,000



on the pipelines— CAMERON VALVES are cutting costs

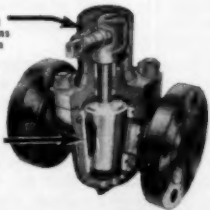
Maintenance of lubricated plug valves requires costly man-hours and valve grease. Many pipeline operators have discovered the advantages of Cameron Non-Lubricated Lift Plug Valves. These remarkable valves effect a tight seal and operate with surprising ease without lubrication of any kind. Obviously, there is no danger of valve grease contaminating the line product . . . an extremely important consideration, not only on lines carrying aviation gasoline, butane, etc., but on food and beverage lines as well.

Whatever your business is, if it requires valves, chances are that Cameron Non-Lubricated Lift Plug Valves will give you a better run for your money. May we send you our catalog?

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Releasable seat
permits any
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Cameron
NON-LUBRICATED
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tons of cotton, and 10,000 tons of crude rubber. Its exportable surplus of coffee was more than 30,000 tons.

• **Industrial Growth**—Recently, there has been a big expansion of industries such as textiles, processed foods, tobacco, furniture, glass, and building materials. This rapid development of mining, agriculture, and industry has created many headaches for the Belgian administrators of the Congo. Transportation facilities have become overstrained, and warehouses bulge with goods that can't be moved.

There's a serious shortage of trained labor, despite the efforts of the government and the big business firms to provide elementary education and technical training for the natives. The colony's native population of 11-million still is only a generation or two from cannibalism. The total labor force available for mining and other European enterprises is less than 1-million.

• **10-Year Plan**—To meet problems like these, the Belgians in 1950 launched a 10-year development program. Under the plan, the Congo government is to spend \$500-million. Half this sum is for expansion of transportation facilities and the other half for housing, education, public health, agricultural research, and electric power plants. Over the 10 years, private industry is expected to spend another \$500-million in expanding existing facilities or launching new projects.

II. No Lack of Foreign Capital

The Congo government has had little trouble attracting foreign capital to back its 10-year plan. A loan of \$46-million was quickly floated in Belgium, and another of \$14-million in Switzerland. (A second Swiss loan of the same size is in the works now.) The Congo borrowed \$17-million from the Economic Cooperation Administration for road and waterway programs plus hydro-electric development. ECA also advanced \$1.7-million to cover the dollar costs of a private tin expansion project.

Last year the World Bank approved two 25-year loans totaling \$70-million—\$40-million for the Congo government and the rest for the Belgian government.

• **Belgians Dig In**—Probably foreign lenders are even more impressed with the job that several big Belgian companies are doing in the Congo today. It's from these companies that the real driving force is coming. Here's the way the principal companies stack up:

The biggest of the mining firms is the Union Miniere du Haut Katanga, a company with Congo assets valued at over \$150-million. Union Miniere mines about all the Congo's copper, all the uranium, and a good part of the tin, cobalt, silver, and zinc. For several

years this company will put \$20-million a year into the expansion of its copper output. A lot of the money is going for a hydroelectric project with a capacity of 500-million kwh. a year.

Societe Internationale Forestiere et Miniere (Forminiere) controls all the diamond mining in the Congo and has big interests in rubber, cocoa, coffee, palm oil, and lumber.

Geomines is the biggest tin producer in the colony. Financial control is in the hands of Brufina, a group of Belgian investors, and the Banque de Bruxelles.

• **Top Dog**—On top of this heap stands Societe Generale de Belgique, the strongest financial power in Belgium itself. The Societe Generale holds all the Belgian stock in the Union Miniere (there's also some British and American money in this mining firm) and has a controlling interest in the Forminiere. Also, it has big interests in railways, shipping, trading, electric power, cement, and other Congo industries.

In addition, Societe Generale controls the Banque de Congo Belge, which has operated for years as a central bank for the colony, with power to issue currency. Come July 1, these functions will be taken over by a state bank. But Societe Generale will still do a big banking business—through the Banque Commerciale de Congo, which does three-fourths of the commercial banking in the colony.

Biggest non-Belgian company in the Congo is Huilever, a Unilever subsidiary. This firm produces about half the Congo's palm oil exports.

• **U.S. Stakes**—American oil, auto, and machinery firms have had distributing organizations in the Congo for some time. Now U.S. interests are going into the manufacturing field. U.S. Plywood is building a modern veneer plant near Leopoldville; American Rolling Mills Co. has bought property in the same vicinity for a small galvanized iron plant; Rockefeller interests operate a cotton mill near Albertville; the Brown Paper Co. and Readers Digest have plans to join with Belgian capital to build a \$10-million wood pulp mill.

Legally, any nation has the same trading and investment rights in the Congo as Belgium. But in fact, it would be hard for any outsider to make a big splash in Congo business today unless he teamed up with Belgian money. For the Congo's governor general, who has power to decide what is desirable for the colony's welfare, works hand in glove with the big Belgian interests.

• **What's Whose**—At times it is pretty hard to distinguish between what belongs to Societe Generale and what belongs to the Congo government. For Societe Generale staked a claim in the Congo back in 1900, when the



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colony was still the private domain of King Leopold II.

Leopold took the Societe Generale in as a minority partner in the formation of Union Miniere, which got exclusive mining rights in a large part of Katanga in 1906. Then, when the Belgium state, as distinct from the crown, took the colony over in 1908, the crown's two-third's interest in Katanga mining rights was passed on to the Congo government. The local administration automatically received shares in any new mining development in the colony.

III. Great White Father

Business and government cooperate, too, in keeping the Congo's native population under a paternalistic form of government. The governor general has autocratic powers. Unlike neighboring British and French colonies, the Congo has no legislative body representing either the whites or the blacks. The Belgians defend this system on the ground that self-government in the Congo would mean domination of the blacks by the 15,000 whites who have permanent residence there.

• **Educated Misfits**—The education policy in the Congo differs also from that in British and French colonies. One-third of all the native children get elementary schooling, and the aim is to give education to them all. But Congo natives aren't encouraged to go to Europe for university study. The Belgians claim they would merely return to the Congo as misfits, without any real roots in the country.

• **Men of Distinction**—The Belgian administrators use imagination in handling the natives. For example, in collecting taxes the government gives the natives medals to hang around their necks, rather than tax receipts. The success of this technique was confirmed recently when a group of pygmies, the most backward of Congo tribes, petitioned the government that they be allowed to pay taxes like everyone else.

Or take the tax on extra wives. Some native chiefs still have as many as 400 wives; large numbers of the more prosperous natives keep several. (It's considered proper for a well-balanced harem to include at least one pygmy.) To have many wives is a sign of prosperity. So the natives pay this tax willingly, even proudly.

IV. The Changing Picture

History has a different story to tell of the early years of the Congo. Not long after Stanley helped open up the country for Leopold II in the early 1880s, the natives were forbidden to collect ivory and rubber except for the state.

Conditions like these changed rapidly, though, after the Belgian government took over the Congo in 1908. And the improvement in native welfare has gone on steadily ever since. Even so, some outside observers think that the paternalistic technique won't work very much longer, that ideas of self-government will seep into the Congo from neighboring colonies. But, assuming continued prosperity, most observers agree that the Congo has at least another 10 years before the present paternalistic system will be under any serious pressure from the natives.

The House of Ullstein Returns to Publishing

The House of Ullstein is in business again. The famous Berlin publishing house, Ullstein Verlag, was confiscated in 1934 by Hitler. Two weeks ago a West German court gave it back to its owners, 77-year-old Rudolph Ullstein and his nephew Karl, both recently returned from a 10-year stay in the U.S. The Ullsteins also will get back their printing plant, in the largest skyscraper in the Tempelhof section of Berlin.

Hints about future plans for the firm include two women's magazines, a general magazine for the housewife and a dress-pattern magazine. Starting up a newspaper will be much more difficult, the Ullsteins say, due to the problems of circulation in the divided city. If past performance means anything, it's a good bet that the Ullsteins will not only publish magazines and books, but will start a newspaper.

The Ullstein firm, founded in 1877, became the largest publishing house in Europe during the 1920s. At that time it employed 10,000 persons, made profits of more than \$6-million a year. It published four daily papers, among them the famous Morgenpost, with a circulation in Berlin alone of almost 500,000.

Along with the newspaper business, and the huge book publishing concern that turned out 2-million books a year, the Ullsteins founded the first weekly picture magazine in Germany. Among their weekly magazines, the biggest were the Berliner Illustrierte Zeitung, circulation 2-million, and the respected Gruene Post, circulation 1-million.

Although the block-long office building on the Kochstrasse was destroyed, and the Russians made off with two of the presses in Tempelhof, the Ullsteins will still own the biggest printing plant in Europe. It's being used now by other firms, turns out six daily papers, including the U. S. Army's Allgemeine Zeitung and 10 weeklies.



SIMON BENIN displays an alabaster-and-mahogany coffee table. It and this . . .



MAHOGANY CHEST, scrolled in silver, will be part of the line of de luxe furniture, U.S.-designed but made by skilled Mexican hands, which will be shown when . . .

Mexico Invades U.S. Furniture Field

Modern furniture fans, who have long been raving about Scandinavian, and more recently Italian, imports, will have a chance to look over Mexican modern next month. A carload of living, dining, and bedroom pieces—made of Mexican mahogany and silver—will arrive in New York for a showing to the trade. If the line goes over with the department stores and decorators, Mexican business may have one of its first important manufactured exports for the U.S. market.

Observers who have followed the venture give it a good chance of success. At least, it has sturdy international backing:

- Axel Wenner Gren, Swedish electrical tycoon now living in Mexico, is helping with the financing.

- Edmond J. Spence, Inc., top-flight New York designer, has planned the furniture with an eye on U.S. living habits.

- Industria Mueblera S. A., which will make the furniture in Mexico City, already boasts a solid success in making cabinets for U.S. radio and television manufacturers.

- Small Start—Mueblera's suave boss, Simon Benin, will tell you his success story at the drop of a hat. Back in 1946, Mueblera was a small-scale furniture outfit, employing 80 persons, selling \$50,000 worth of goods yearly. It had little or no modern equipment. Then the Mexican government

decreed that no more complete radio sets could be imported, as many parts as possible must be made locally. That gave Benin a shot at the cabinet business—and he came out with flying colors. Soon General Electric, RCA, Philco, Zenith, and Sears, Roebuck were standing in line for his consoles; some, in fact, were sent to the U.S. Then along came television, opened a brand-new field for Benin's cabinets (BW—Aug. 12 '50, p108).

Last year Mueblera sold 50,000 cabinets worth \$2.5-million, ranked as Mexico's largest furniture maker. It had 800 employees, imported \$150,000 worth of U.S. equipment during the year. Benin fairly bubbles about the outlook for the future, hopes some day he'll be employing 6,000.

- Cheap Labor—Benin's formula is simple: U.S. equipment (he has the latest electronic molding presses) and knowhow, plus inexpensive Mexican labor. Add to that Benin's own experience in France, studying and reproducing antique furniture.

It was in France that Axel Wenner Gren noticed Benin's handiwork with furniture; later, in Mexico, he offered to back Mueblera in mass production. Last fall came the plan to tackle the U.S. market. Benin scouted New York, found Edmond J. Spence, who—among other things—designs furniture for Swedish manufacturers selling in the U.S.

Simon Benin's instructions to Spence were:

Design functional furniture aimed at the plushiest U.S. market; key it to Mexican culture, using Aztec, Mayan, and Toltec motifs; and make use of Mexico's wealth of raw materials. The great mahogany forests of the Yucatan peninsula provide a practically inexhaustible supply. And since Mexico is the world's top silver producer, the line will feature silver-plated legs, scrollwork, hinges. Alabaster, leather, palm cording trim will be used, too.

- Not for a Song—The combination is often striking—and it's far from cheap. Retail prices haven't been set yet, but a piece like the coffee table (above) may run to \$200.

Simon Benin figures the furniture will be worth it. His greatest treasure, he says, is his labor. He insists that hand-rubbed finishes are better than anything a machine can do, has refused to allow any mechanization of the process.

In Mueblera's Mexico City plant, a visitor will see rows and rows of Mexican youths rubbing away. Simon Benin boasts that his wage scale is the highest in the federal district, says that the "boys he took off the street" and trained himself are the world's finest craftsmen. Now he's working on the second generation; fathers are bringing their sons into the plant to learn the business.

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BUSINESS ABROAD BRIEFS

Rumor from Germany: Hjalmar Schacht, Hitler's financial wizard now turned free-lance consultant, has an offer to come to Egypt to advise on money matters. He recently returned from a similar job with the Indonesian government. Egyptian agents are trying to recruit German military and technical advisers, too.

The hormone ACTH will be made in Australia by Pacific Laboratories, Inc., of Richmond, Calif. A subsidiary will be set up there to take advantage of Australia's abundant supply of sheep, whose pituitary glands supply the hormone. There will be no exports, though, until Australian requirements are satisfied.

Land of Peronist plenty: Argentines, who eat more beef per capita than anyone else in the world, will have one meatless day weekly in restaurants. Official reason for the ruling: a more balanced diet for the people. Funny coincidence: Argentina is falling behind on meat shipments under its trade agreement with Britain.

Spanish business: Koppers Co. will design and deliver a dimethyl aniline plant for Asturiana de Minas, to go up at Torrelavega. . . The first Gibraltar-North Africa ferry-boat service is expected to begin in May. Among other things, it will speed railroad freight between the two continents. . . A one-year film pact has been signed by Hollywood and Madrid. It allows import of 100 feature films; the cost of an import permit is around \$12,000 per film. Over a year ago, U.S. producers stopped sending movies to the lucrative Spanish market because import permits had to be bought in the black market at arbitrary prices.

Pennsalt de Mexico, S. A., is a new subsidiary of Pennsylvania Salt Mfg. Co., Philadelphia. Its Mexico City plant will produce insecticide dusts for agricultural use.

Brazil notes: A French manufacturer—Societe de Trolleybus, Paris—hopes to set up a factory to make electric trolleybuses in Brazil. There's a good market: several cities have already either ordered or called for bids on the conveyances. . . Merritt-Chapman & Scott, New York engineers, plans to join with Sao Paulo businessmen and establish a Brazilian subsidiary. . . E. W. Bliss Co., Canton, Ohio, has a \$500,000 contract to design and supply equipment for a new hot-strip rolling mill at the Volta Redonda steelworks.

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AMERICAN APPRAISAL CO..... 101 Agency—Klan-Van Pelterson-Dunlap Assoc., Inc.	ECONOMY PUMPS INC..... 118 DIV. OF C. H. WHEELER MFG. CO. Agency—The R. C. Baer Co.	OSALD PRODUCTS DIV. OF GENERAL AIRLINE & FILM CORP..... 74 Agency—The Rice Co., Inc.
AMERICAN BLOWER CORP..... 78 Agency—Brooks, Smith, French & Derrano, Inc.	ELASTIC STOP NUT CORP. OF AMERICA..... 81 Agency—G. M. Hasford Co.	PACIFIC INTERMOUNTAIN EXPRESS..... 100 Agency—Brinsler, Wheeler & Hall
AMERICAN NAME PLATE & MFG. CO..... 124 Agency—Geo. J. Cowan	ELKAY MFG. CO..... 93 Agency—Christopher, Williams & Bridges	PARSONS PAPER CO..... 101 Agency—Wilson, Haight & Welch, Inc.
AMERICAN NICKELOID CO..... 40 Agency—Keaneth B. Butler & Assoc.	EMECO CORP..... 90 Agency—Louis E. Shuster Adv. Agency	PATERSON PARCHMENT PAPER CO..... 40 Agency—Platt-Forbes Inc.
AMERICAN RADIATOR & STANDARD SANITARY CORP..... 8 Agency—Barton, Barton, Durstine & Osborn, Inc.	EMERY AIR FREIGHT CORP..... 84 Agency—J. M. Mathis, Inc.	PERRYGRAP CORP..... 118 Agency—Hamilton Adv. Agency, Inc.
APPLETON ELECTRIC CO..... 91 Agency—Aubrey, Finlay, Marley & Holgman, Inc.	THE EGG HOUSE..... 68 Agency—Needham & Grohmann, Inc.	PITTSBURGH CORNING CORP..... 97 Agency—Barton, Barton, Durstine & Osborn, Inc.
ARMCO STEEL CORP..... 67 Agency—N. W. Ayer & Son, Inc.	THE FAFNIR BEARING CO..... 3rd Cover Agency—Horton-Noyes Co.	PREFABRICATED HOME MANUFACTURERS' INSTITUTE Agency—Olmsted & Foley..... 130
ARMSTRONGS CORK CO. (INDUSTRIAL ADHESIVES DIV.)..... 69 Agency—Barton, Barton, Durstine & Osborn, Inc.	FARR CO..... 134 Agency—Willard G. Gregory & Co.	PULVERIZING MACHINERY CO..... 100 Agency—Merrisady, Handy & Van Denburgh
ATLAS CORP..... 122 Agency—Allen Frank Gundersen Law, Inc.	FERRO CORP..... 119 Agency—Fuller & Smith & Ross, Inc.	THE RAULAND-BORG CORP..... 59 Agency—George Brodsky
AVCO MFG. CORP. (LYCOWING-SPENCER DIV.)..... 38-39 Agency—Bentley & How, Inc.	THE FIRST BOSTON CORP..... 120 Agency—Dorchester Co. Co.	REMINOTON RAND, INC..... 27 Agency—Leoford Adv. Agency, Inc.
BAKELITE CO. DIV. OF UNION CARBIDE & CARBON CORP..... 11 Agency—J. M. Lee, Inc.	FOOD MACHINERY & CHEMICAL CORP..... 12 Agency—The McCarty Co.	REPUBLIC STEEL CORP..... 115 Agency—Melvrum & Fessmuth, Inc.
BALTIMORE & OHIO RAILROAD..... 31 Agency—The Richard A. Foley Adv. Agency, Inc.	GAYLORD CONTAINER CORP..... 60 Agency—Oakleigh R. French & Assoc.	REVERE COPPER & BRASS, INC..... 83 Agency—St. Georges & Reyes, Inc.
BAY WEST PAPER CO. (DIV. OF MOHAWK PAPER MILLS CO.)..... 114 Agency—Klan-Van Pelterson-Dunlap Assoc., Inc.	GENERAL ELECTRIC CO. (LAMP DEPT.)..... 10 Agency—Barton, Barton, Durstine & Osborn, Inc.	REVOLVATOR CO..... 84 Agency—La Porte & Austin, Inc.
BORG-WARNER CORP..... 28 Agency—Rogers & Smith	GENERAL REFRACTORIES CO..... 79 Agency—Lewis & Gilman, Inc.	REYNOLDS METALS CO..... 123 Agency—Price, Robinson & Frank, Inc.
BRITISH INDUSTRIES FAIR..... 124 Agency—Hewitt, Ogley, Benson & Mathis, Inc.	THE B. F. GOODRICH CO..... 1 Agency—The Griswold-Ebbelman Co.	RHINELANDER PAPER CO..... 32 Agency—Frank C. Naher, Inc.
L. L. BROWNE PAPER CO..... 84 Agency—Hare Advertising	GRINNELL CO., INC..... 29 Agency—Horton-Noyes Co.	ROCKWELL MFG. CO..... 116 Agency—Marsteller, Gebhardt & Reed, Inc.
BROWN & ROOT, INC..... 90 Agency—Laughlin-Wilson-Dexter & Persons	GUNNISON HOMES, INC..... 106 Agency—Advertising Associates Adv. Agency	SHAKEPROOF, INC..... 4th Cover Agency—Walsh & Briggs, Inc.
BULKLEY, DUNTON PULP CO..... 73 Agency—Stephen Lee, Assoc.	HAHNEMULLER PAPER CO..... 4 Agency—Needham & Grohmann, Inc.	SHAW WALKER CO..... 71 Agency—Kenyon & Eckhardt, Inc.
BUNDY TUBING CO..... 111 Agency—Brooks, Smith, French & Derrano, Inc.	HERCULES POWDER CO..... 131 Agency—Fuller & Smith & Ross, Inc.	SHELLMAR PRODUCTS CORP..... 65 Agency—Howard Selink Advertising Agency, Inc.
BYRON WESTON CO..... 62 Agency—Walter R. Snow & Staff, Inc.	HILTON HOTELS CORP..... 125 Agency—Needham & Grohmann, Inc.	THE SOCIETY OF THE PLASTIC INDUSTRY, INC..... 110 Agency—The Roland G. K. Ullman Org. Inc.
CAMERON IRON WORKS CORP..... 146 Agency—Hires Doyle & Co.	THE HIMDE & DAUCH PAPER CO..... 70 Agency—Howard Selink Advertising Agency, Inc.	SOUTHERN RAILWAY SYSTEM..... 142 Agency—Cunningham & Walsh, Inc.
CAMPBELL CHAIN CO..... 138 Agency—The Altkin-Kynett Co.	HOTELS STATLER CO., INC..... 14 Agency—Young & Rubicam, Inc.	SPERRY GYROSCOPE CO., INC..... 17 Agency—Chas. Dallas Resch Co., Inc.
CARRIER CORP..... 129 Agency—N. W. Ayer & Son, Inc.	THE FRANK & HOUGH CO..... 44 Agency—Ertin R. Abramson	STANDARD CONVEYOR CO..... 73 Agency—Klan-Van Pelterson-Dunlap Assoc., Inc.
CELANESE CORP. OF AMERICA..... 117 Agency—Ellington & Co., Inc.	INTERNATIONAL HARVESTER CO. (MOTOR TRUCK DIV.)..... 133 Agency—Young & Rubicam, Inc.	STANDARD PRESSED STEEL CO..... 63 Agency—Gray & Rogers
CHART-PAK, INC..... 101 Agency—Moore & Co., Inc.	JONES & LAMSON MACHINE CO..... 132 Agency—Henry A. Loudon Adv. Inc.	STANDARD RAILWAY EQUIPMENT MFG. CO..... 124 Agency—W. R. Kirkland
CHEMICAL WEEK..... 103 Agency—N. W. Ayer & Son, Inc.	THE KAWNEER CO..... 82 Agency—J. R. Pershall Co.	SUN OIL CO..... 105 Agency—Gray & Rogers
CHRYSLER CORP..... 55 Agency—N. W. Ayer & Son, Inc.	KAYDON ENGINEERING CORP..... 107 Agency—Klan-Van Pelterson-Dunlap Assoc., Inc.	SUNRAY OIL CORP..... 83 Agency—Watts, Payne Adv. Inc.
CLAPP & POLIAK..... 95 Agency—James R. Flanagan Adv. Agency	KELITE PRODUCTS, INC..... 98 Agency—Little & Co.	TENNESSEE PRODUCTS & CHEMICAL CORP..... 41 Agency—The Griswold-Ebbelman Co.
CLARK INDUSTRIAL TRUCK DIV. CLARK EQUIPMENT CO..... 89 Agency—Marsteller, Gebhardt & Reed, Inc.	KEYSTONE STEEL & WIRE CO..... 113 Agency—Mace Adv. Agency, Inc.	THE TIMKEN-DETROIT AXLE CO..... 112 Agency—MacMann, John & Adams, Inc.
CLEARING MACHINE CORP..... 140 Agency—Grinn & Craig	LAKE ERIE ENGINEERING CORP..... 65 Agency—Cunstock & Co.	TRANS WORLD AIRLINES, INC..... 62 Agency—Barton, Barton, Durstine & Osborn, Inc.
CLEVELAND ELECTRIC ILLUMINATING CO..... 137 Agency—D. A. Avey Adv. Co.	R. G. LATOURNEAU, INC..... 61 Agency—Andrews Agency, Inc.	THE TRUNDLE ENGINEERING CO..... 43 Agency—Fuller & Smith & Ross, Inc.
CLUB..... 150 Agency—N. W. Ayer & Son, Inc.	LURIA ENGINEERING CORP..... 61 Agency—Store & Kuhn	UDYLITE CORP..... 42 Agency—Grant Adv. Inc.
COLUMBIA BROADCASTING SYSTEM, INC..... 56-57 Agency—Cummings & Hopkins	MANNING, MAXWELL & MOORE, INC..... 62 Agency—Fuller & Smith & Ross, Inc.	U. S. FIDELITY & GUARANTY CO..... 36 Agency—Van Sant, Dunlap & Co., Inc.
CONTINENTAL AVIATION & ENGINEERING CORP..... 60 Agency—Cummings & Hopkins	MARSH & McLENNAN, INC..... 128 Agency—Doremus & Co.	UNITED STATES PLYWOOD CORP..... 130 Agency—Marshall & Pratt Co.
CONTINENTAL CAN CO..... 78-79 Agency—Barton, Barton, Durstine & Osborn, Inc.	McGRAW-HILL BOOK CO., INC..... 148 Agency—Edward Hamburger Co., Inc.	WAGNER ELECTRIC CORP..... 3 Agency—Arthur R. Mose, Inc.
CONTINENTAL TOOLING SERVICE, INC..... 84 Agency—Don Krueger Co., Inc.	MERCURY MFG. CO..... 98 Agency—O'Grady-Anderson-Gray, Inc.	WEBSTER ELECTRIC CO..... 109 Agency—Hamilton Adv. Agency, Inc.
CROWN CAN CO..... 130 Agency—The Clements Co.	THE MICHAELS ART BRONZE CO., INC..... 50 Agency—H. B. Humphrey, Alley & Richards, Inc.	WESTINGHOUSE ELECTRIC CORP..... 33 Agency—Fuller & Smith & Ross, Inc.
DOBECKMUN CO..... 78 Agency—Anderson & Cairns, Inc.	MONSANTO CHEMICAL CO..... 135 Agency—Gardner Electric Co., Inc.	WESTINGHOUSE ELECTRIC CORP. (ELEVATOR DIV.)..... 5 Agency—Fuller & Smith & Ross, Inc.
DOW CORNING CORP..... 8 Agency—Don Waggoner	MORGAN STANLEY & CO..... 122 Agency—Doremus & Co.	WESTINGHOUSE ELECTRIC CORP. (LAMP DIV.)..... 86-87 Agency—Fuller & Smith & Ross, Inc.
E. I. du PONT de NEMOURS & CO..... 45 Agency—Barton, Barton, Durstine & Osborn, Inc.	NATIONAL CASH REGISTER CO..... 2nd Cover Agency—McNann-Erickson, Inc.	DAVID WHITE CO..... 66 Agency—Klan-Van Pelterson-Dunlap Assoc., Inc.
		JOHN ZINK CO..... 122 Agency—Watts, Payne Adv. Inc.

Mr. Hoover's Gibraltar of Freedom

Herbert Hoover wants to reopen the Great Debate.

A year ago he went before the American people with a plea that we abandon our efforts to resist the Kremlin abroad, that we retreat to the Western Hemisphere and make it a fortress against world communism.

His views had a full airing and attracted some support. But the Congress, acting for the American people, rejected them. It approved troops for Europe and a military aid program. Gen. Eisenhower, as a symbol of America's determination to stand with its partners of the free world, went to Europe to rally and organize its defense.

Hoover believes the year's effort has been a failure. He calls now for a withdrawal of our troops from Europe and a retreat to the Western Hemisphere, which he wants held as a "Gibraltar of freedom."

BUSINESS WEEK rejected the Hoover doctrine of retreatism a year ago (BW—Jan. 6 '51, p120). His call to reopen the debate now is unconvincing.

There is little new in the former President's case this time except an inventory of the rocks in the road to building a united defense against the Kremlin. We have not made the progress we expected, he says. That is true. Gen. Eisenhower himself has spoken of it.

But the NATO doughnut is a good deal more than hole:

- A marked lifting in the morale of Western European nations has come about. There is concrete evidence in increased defense budgets of all these countries, even though progress has been slow.

- The core of a force has been developed that will make any Russian thrust to the English Channel costly and difficult.

- Out of this common effort a European army is being born. That is a revolutionary step in the unification of Europe.

- Western Germany is being brought back into the Atlantic community through participation in the European army. This whole project has hinged on our support and offers the best hope of hastening the day of departure for our troops.

These are to us solid, real facts of the first importance. They outweigh Hoover's pessimism.

But the nub of Hoover's concern rests on economic grounds: For the United States to try to carry such a program means grinding down our economy between the millstones of taxes and inflation. Here the former President deals in very real dangers. But it's a matter of alternatives. The free world allowed the Communists to catch it with a tremendous military deficit. We properly saw the Red aggression in Korea as a signal that we must make up that deficit, despite rough going for a couple of years.

But we have some control over this burden. We can phase out our rearmament program, as we are now doing, and we can manage with more intelligence the inflationary consequences of making up for our earlier negligence. Whatever these costs may be, the Hoover alternative would scarcely be cheaper once we were an island in a hostile Communist sea.

Actually, Hoover and Eisenhower are not far apart on the ultimate role of American troops abroad. This is what the general has said:

The large scale permanent commitment of American troops to relatively fixed defensive positions outside the continental limits would be costly beyond military return. . . . Our own job is production and the ability to move strong units and destructive power quickly over great distances.

But the basic philosophy of the two men and their sense of timing are worlds apart. Eisenhower understands that every free nation, even ours, needs allies. He believes that our withdrawal from Europe now would produce World War III rather than avoid it, as Hoover argues. He realizes that with Europe left to the Kremlin Asia would rapidly slip down the Communist drain.

Eisenhower is right. For our part we will support the great mission he is carrying out for our country. To insure the success of that mission, we must be vigilant to maintain our economy strong and sound.

Good Appointments

Two appointments have brought the Board of Governors of the Federal Reserve System up to full strength for the first time since last spring. To fill the vacancies caused by the resignations of Marriner S. Eccles and Edward L. Norton, the President named:

- Abbot L. Mills, Jr., first vice-president of the U.S. National Bank of Portland, Ore.

- James L. Robertson, First Deputy Controller of the Currency.

These are good appointments, known to be first choices of board chairman William McC. Martin.

Mills, 53-year-old banker, is a militant believer in an independent Federal Reserve System, free from Treasury domination. Robertson, a first-rate government career man, is widely respected in banking circles because of his work in the Controller's office where supervision of national banks centers up. Rumors that his previous association with a Treasury agency means trouble for the idea of an independent Reserve are without foundation.

These appointments are a tribute to chairman Martin's influence with the President in the interest of building a two-way street between the Federal Reserve System and the Treasury.

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Typical Fafnir "packaged"
ball bearing units.



PILLOW BLOCKS
Medium and Heavy Series



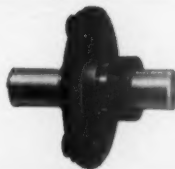
CARTRIDGES
Light and Heavy Series



PILLOW BLOCKS
Fixed and Floating Types



RUBBER UNITS



FLANGETTE

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KEPS



SEMS

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SHAKEPROOF Lock Washers are
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screws (SEMS) or nuts (KEPS).



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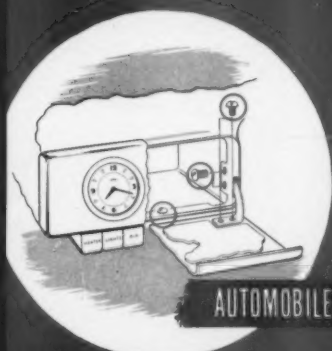
"Fastening Handmaidens"

T.O. 708, N.Y. 207, S.F. 974

DIVISION OF ILLINOIS TOOL WORKS

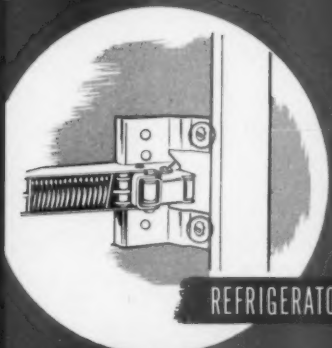
At Chicago Road, St. Louis, Missouri

In Canada, Canada Shake Tools Ltd., Toronto, Ont.



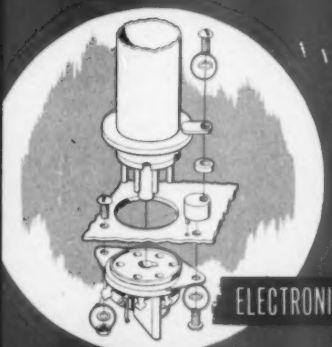
AUTOMOBILES

Here SHAKEPROOF Lock Washers are
used to lock glove compartment assembly
fastenings tight... positive protection
against vibration loosening and
the abuse of frequent slamming.



REFRIGERATORS

This refrigerator door latch mechanism
is carefully adjusted for proper closing
action. SHAKEPROOF Lock Washers
hold the fastenings tight and prevent
shifting of the assembly in service.



ELECTRONICS

This application is typical of the extensive
use of SHAKEPROOF Lock Washers
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of all kinds, protecting vital fastenings
against loosening and ensuring
efficient electrical grounding.